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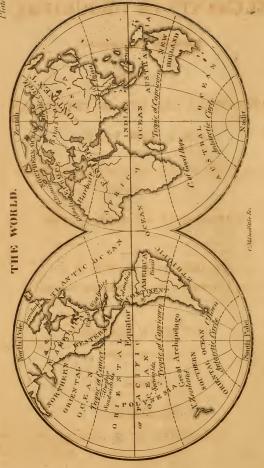












# ELEMENTS OF GEOGRAPHY,

EXHIBITED HISTORICALLY,

FROM THE

#### CREATION TO THE END OF THE WORLD

ON A NEW PLAN,

ADAPTED TO CHILDREN IN SCHOOLS AND PRIVATE FAMILIES.

ILLUSTRATED BY FOUR PLATES.

BY JEDIDIAH MORSE, D. D.

Author of the American Universal Geography, Gazetteer, &c.

THE SIXTH EDITION.

Revised and corrected

**NEW-HAVEN**:

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1825

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BETT RESIGNIBERED That on the thirternth day of September in the fiftieth year of the independence of the United States of America, Jedidiah Morse of the said district, hath deposited in this office the title of a book, the right whereof he claims as author, in the words following, to wit:

· Elements of Geography, exhibited historically, from the creation to the end of the world: on a new plan, adapted to children in schools and private families Illustrated by four plates. By Jedidiah Morse, D. D., Author of the American Universal Geography, Gazetteer, &c.

In conformity to the act of the Congress of the United States, entitled, "An act for the encouragement of learning by securing the copies of maps, charts, and books to the authors and proprietors of such copies during the times therein mentioned."

CHARLES A. INGERSOLL. Clerk of the District of Connecticut.

A true copy of Record, examined and sealed by me,

CHARLES A. INGERSOLL. Clark of the District of Connecticat.



# PREFACE.

THE present state of the world, and the prospects opening before us, render a knowledge of Geography a necessary part of a good education. The fact, that school-books, for teaching this science, have, within a few years, become numerous, beyond all former example, shows that such is the universal opinion. In this eventful period of the world, when changes and improvements of the most important kind, are every where multiplying with a rapidity altogether astonishing; when "many are running to and fro through the earth, and knowledge is increasing;" when missionaries of the cross are spreading the everlasting gospel among all the nations of the earth, no wonder that every one, who is awake to behold these things, should be anxious to become acquainted with every part of a world, in which the Creator seems now to be displaying his perfections in the most conspicuous and glorious manner.

The following opinions of the science of Geography, as adapted to youthful minds, deserve particular attention. "There is not a son or daughter of Adam, but has some concern both in Geography and Astronomy." "Among those studies which are usually recommended to young people, there can be few that might be improved to better uses, than Geography." "Those

branches of science, which lead the mind to attend to the appearances of nature, are suited to raise exalted thoughts of the Great Creator."

All our school-books should be formed with particular reference to the moral improvement of the rising generation; in a manner best adapted to make correct impressions on their minds, and to excite useful inquiries. None of the sciences can be managed to effect these purposes so well, as Geography, combined, as it naturally and necessarily is, both with Astronomy and History. These sciences, which are blended in this book, These sciences, which are blended in this book, at once entertain and enlarge the mind; and yet in their elements are so simple and easy to be understood, that the study of them can hardly be begun at too early a period. I have known children who would point to continents, oceans, and other places on the globe and maps, before they could pronounce their names, and who, at the lisping age, would promptly tell, when asked, the name of the continent, the country or nation, the state, the county, and town where they were born. Children are pleased while looking over a map, or globe, and delighted when they find a place, of which they have read with interest in the Bible, or some history, or newspaper. They place, of which they have read with interest in the Bible, or some history, or newspaper. They are naturally inquisitive, and by judicious ma-nagement their curiosity is easily excited, and they begin to ask questions; and thus a way is opened to pour into their minds useful know-ledge, "to teach the young idea how to shoot," and so to bend "the twig," as to give "the tree" its proper inclination.

Geography appears to be the first in the order of the sciences, and children, whose capacities are too generally underrated, are able, at a very early age, to understand its elementary principles. They are as capable of learning what is useful, as of those worse than unmeaning tales, which they are too often taught for their amusement. They are better pleased with truth, than with fiction. The latter is calculated only to create and gratify a false taste, which gives the parent, afterwards, the unnecessary and difficult labor

of correcting.

The plan of this elementary work, it is believed, has never been before adopted. It has appeared to its author, from the first thought of it, and on the most mature deliberation, to be the only natural plan for a first book on Geography. It embraces a view of the world in its origin, pro-It embraces a view of the world in its origin, progress, and end. Such a comprehensive view of a whole subject, is gratifying to any mind—to the minds of children especially. When they enter on the study of Geography, they will very naturally inquire, When, and how, did this world, of which we are about to acquire a knowledge, come into being? Who made it? For what purpose was it made? When and where, were the first parents of the human race created? What great events have happened in this world, since it was created? How long is it to last? What will be its end? A thousand other pertinent questions, will grow out of these general ones, which parents and instructors will be pleased to answer. answer.

• The Author has divided his work, into Ancient, Modern, and Prospective Geography, as the natural divisions; and has subdivided it, according to the several subjects, into sections of convenient length for lessons. To aid both the instructor and pupil, he has subjoined to each section, a set

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of questions, answers to which will be found in the section to which they are annexed. In this way, the *judgment* of the child will be called into exercise in selecting the proper answer, as well

as the memory, in retaining it.

As a great part of the facts and information contained in this work is derived from the Bible, of all books the best and most to be relied on, and on the most important topics, the only authentic source, the author hopes the study of it will, in an easy and pleasant manner, lead our youth to the study of this sacred Book, the tendency of which is to make them truly wise, and happy for ever.

NEW-HAVEN, Sept. 1825.

Note.—The Author of these Elements, takes leave to recommend, that there be provided by the instructor, or the parents of the pupils, in every school where this book is used, a colored map of the world, and a copy of the new universal Atlas, colored, just published by N. and S. S. Jocelyn, New-Haven, constructed on an improved plan. These will be useful, and even necessary, to the young pupils, for reference, and will be sufficient, with the plates in this book, for their purpose, till they shall arrive at an age to use an atlas themselves.

Every pupil should be required to consult the Dictionary, and thence to give the meaning of all the words used in this book, which he does not understand. This will prove a profitable exercise to the child, and give him a more correct knowledge

of the science he is studying.

# ELEMENTS OF GEOGRAPHY.

#### SECTION L

#### DEFINITION OF GEOGRAPHY.

Geography, in the largest sense of the word, is a description of the earth, and of those heavenly bodies, which were created, and are inseparably connected, with it. We give this large, and, perhaps, new meaning to the word, because the Creator, at the beginning, connected the heavens with the earth. And what He has thus joined together in their creation, we would not put asunder in the description. These bodies together form the Solar System, of which an account will be given in its place.

## Of the Creation of the Earth and the Heavens.

When a child enters on the study of geography, we have said in our preface, it will be natural for him to inquire, "When, and how did this world, of which we are about to acquire a knowledge, come into being? Who made it? For what purpose was it made? When and where were the first parents of the human race created? What great events have happened in this world since

it was created? How long is it to last? What will be its end?" Answers to these inquiries are found only in the Bible. Here we learn, that "In the beginning," or 5825 years ago, "God created the heavens and the earth." He might but have spoken the word, and this work of creation would have been instantly done; and have commanded, and all would have stood fast; but he chose to employ six days in completing it.

At first "the earth was without form and void, and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters; and God said, Let there be light, and there was light; and God saw the light that it was good; and God divided the light from the darkness, and God called the light day; and the darkness he called night." This was the work of the first day.

On the second day, God said " Let there be a firmament in the midst of the waters, and let it divide the waters from the waters. And God made the firmament, and divided the waters which were under the firmament, from the waters which were above the firmament: and God called the firmament Heaven."

The firmament, here called Heaven, is supposed to be the air, or atmosphere, which surrounds the earth; and the clouds, which contain the waters, are supposed to be the waters above the firmament.

On the third day "God said, let the waters under the firmament," or those which make a part of our globe, "be gatherd together into one place, and let the dry land appear: and it was so. And God called the dry land, Earth; and the gathering together of the waters, he called Seas."

What are here called Earth and Seas, are now known under the name of Continents and Oceans.

"And God said, let the earth bring forth grass, the herb yielding seed, and the fruit-tree yielding fruit, after his kind, whose seed is in itself, upon the earth; and it was so."

On the fourth day, "God said, let there be lights in the firmament of heaven, to divide the day from the night; and let them be for signs and for seasons.

and for days and for years."

Accordingly "God made two great lights; the greater light," which is the Sun, "to rule the day, and the lesser light," or the Moon, "to rule the night: he made the Stars also. And God set them in the firmament of heaven to give light upon the earth, and to rule over the day, and over the night, and to divide the light from the darkness."

The Sacred historian describes the heavenly bodies here, not as a modern Astronomer would describe them, but as they appear to the unlearned, that he might be understood by the great body of

mankind, who are of this character.

All the heavenly bodies are round, a shape best fitted for motion, and with other like bodies, innumerable, are placed by their Creator in open, infinite space, without any solid foundations, and put into various, continual, and most rapid motions; yet the most perfect order and harmony are preserved throughout the whole.

The various movements of the earth, in connexion with the movements of the heavenly bodies, connected with it, give us the divisions of time called day and night, summer and winter, spring and autumn, seed-time and harvest;—also our

years, months, and days.

For these important purposes, the Creator, in his wisdom, has connected the heavenly bodies, with the earth, and blended inseparably, the science of Geography, with that of Astronomy. So far as relates to the Solar system, both must necessit-

rily be studied together.

On the fifth day, God caused "the waters to bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth, in the open firmament of heaven." "Great whales also, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl, after his kind, did God create, and bless, "saying, Be fruitful, and multiply, and fill the waters in the seas, and let fowl multiply in the earth."

On the sixth day, "God said, Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his

kind: and it was so.

"And God made the beast of the earth after his kind, and cattle after their kind, and every thing that creepeth upon the earth after his kind: and

Godsaw that it was good.

"And God said, Let us make man in our image, after our likeness; and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

"So God created man in his own image: in the image of God created he him; male and female created he them.

"And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it; and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

"And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat.

"And to every beast of the earth, and to every fowl of the air, and to every thing that creepeth upon the earth, wherein there is life, I have given every green herb for meat: and it was so."

When the work of Creation was thus finished, "God saw every thing which he had made," and

pronounced it, "very good."

On the Seventh day, when God had "ended his work which he had made, he rested from all his work, and blessed the seventh day, and sanctified it, because that in it he had rested from all his

work, which God created and made."

Thus God instituted the Sabbath, and at the same time gave an example of the manner of keeping it. It has ever since remained, and been regarded, as a divine Institution, of incalculable benefit to mankind, by the Patriarchs, by the seed of Abraham, the chosen people of God, and since the coming and death of Christ, by the whole Christian world.

"These are the generations of the heavens and of the earth, when they were created: in the day that the Lord God made the earth and the heavens; and every plant of the field, before it was in the earth, and every herb of the field before it grew: for the Lord God had not caused it to rain upon the earth, and there was not a man to till the ground. But there went up a mist from the earth and watered the whole face of the ground."

Some have supposed with plausibility, if not probability, that the earth was watered w thout

clouds or rain, by a "mist from the ground" till the flood; because no mention is made of any rainbow or cloud, until the time when the bow in the cloud was designated as a token of the covenant, which God made with man, and with every living creature of all flesh, that the waters shall no more become a flood to destroy all flesh."

### Questions on Section I.

What is Geography in the largest sense of the word?

What system do the heavens and the earth, together, form?

What inquiries would a child naturally make,

on entering upon the study of geography?

Where are answers to such inquiries to be found?

Who created the heavens and the earth?

How long ago?

How many days was God employed in making the world?

Had he power to do it by a word, in a moment?

In what state was the earth at first?

What was done the first day?

What the second?

What is meant by the firmament, called heaven?

What by the waters above the firmament? What by the waters under the firmament?

What was done by the Creator on the third day?

What are the earth and seas here mentioned

now called?

What was done on the fourth day?

Does the sacred historian speak of the heavenly bodies as an astronomer, or according to their appearances, to the eye of the unlearned?

What is the shape of the heavenly bodies?

Why were they made of this shape? Where are the heavenly bodies placed?

Are they at rest, or in motion?

Is there perfect order in their movements?

What divisions of time do these movements of

the heavenly bodies furnish to mankind?

Has the Creator connected Geography and Astronomy, and must both be studied together?

What was done by the Creator the fifth day?

What, the sixth day?

When God had finished his work and surveyed it, what did he say of it?

What did God do on the seventh day?

Was the sabbath now instituted?

Has it ever since been regarded by some portions of mankind?

What have been its effects?

How was the earth at first watered?

Were there probably no clouds,\* no rain, no rain-bow, before the flood?

Why is this probable?

<sup>\*</sup> No Clouds — This may appear contradictory to what is said of the waters above the firmament, being "the clouds." Perhaps this difficulty will be sufficiently explained by considering, that the descriptions of Moses are according to the known state of things at the time he wrote, which was long after the flood.

#### SECTION II.

#### THE SOLAR SYSTEM.

'This is the system which the Bible denominates, "the heavens and the earth," formed to be a habitation for man. Having given an account of its creation, a description of it naturally follows. Our description will accord with the present knowledge and state of the system, without regard to the changes which took place after the fall.

This system consists of the sun, the planets, and their satellites, and the comets, all which revolve round the sun. By a universal law of the Creator, discovered by Sir Isaac Newton, called the law of Gravitation, or Attraction, these bodies, in their various and rapid movements, have all been kept in their proper places, and have performed their respective revolutions, in the most perfect order, ever since their creation.

This system is called, by modern astronomers, to distinguish it from the Ptolemaic and other incorrect systems, the Copernican system, in honor of Nicolas Copernicus, a native of Prussia, who, in the year 1530, restored the Pythagorean doctrine, and supported the rational and correct system of astronomy, the truth of which has since been confirmed by Sir Isaac Newton, and is now

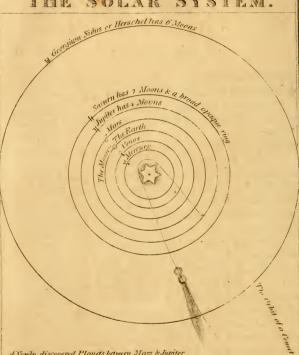
uni rersally received.

There are eight planets belonging to this system named in the table on next page; beside four others newly discovered, whose names will be

found on the plate



# CA Shepresentation of THE SOLAR SYSTEM.



ENewly discovered Planets between Mars & Jupiter all nearly at the same distance from the Sun.

- 1 & Vesta 2 \* Juno
- O Ceres
- Q Pallas

TABLE OF THE SUN AND PLANETS.

-	-			The second name of the second na	I	-
Машев.	Diameter in miles,	Time of rotation on their axes,	Hourly mo- tion in their orbits.	Mean distances from the Sun-	Periodical Revol-	al Revo
Sun,	883,246	d. h. m. s. 25 14 8 0			y. d.	ii ii
Mercury,	3,224	unknown.	111,256	36,583,825	0	87 23 1
Venus,	7,687	23 22 0	81,398	68,360,058	0	224 16 41
Earth,	7,928	23 56 4	75,222	94,507,428	1	5 48
Mars,	4,189	1 0 39 22		144,000,023	1 321	22 18
Jupiter,	89,170	9 55 33	-	491,702,301 1	11 315	5 14 4
Saturn,	79,048	10 16 14	22,351	901,668,908 29	29 164	F-
Herschel,	35,112	unknown	15,846	1,803,534,392 83	83 294	8 39
- The same of the	-		-		-	-

The bodies named in this table, together with their satellites, the comets, and the newly discovered planets, form a system of themselves, and their motions are so far independent of other heavenly bodies, as that all our mathematical tables are formed, and our calculations of eclipses made, without reference to any influence which these other heavenly bodies may have on our own system. If, therefore, our system were struck out of existence, as it is destined to be at some future period, it would not probably affect the other existing systems, of which the fixed stars are supposed to be centres, as our sun is of this; and so numerous are these other systems, that the destruction of ours would hardly be missed.

Mr. Addison was of this opinion. "Were the sun," he says, "which enlightens this part of creation, with all the host of planetary worlds that move round about him, utterly extinguished and annihilated, they would not be missed more than a grain of sand upon the shore. The space they possess is so exceedingly little, in comparison of the whole, that it would scarce make a blank in

the creation."

This view of the works of the Creator suggests the thought, that this earth, with the other parts of the solar system, as its appendages, may have been created specially to be the grand the atre for the display of the wonderful work of Redemption, and of those divine perfections which this most wonderful work has drawn forth to the view and admiration of the intelligent universe. And when this design shall have been accomplished, then the earth and the heavens will be reduced to their primitive nothing. If this thought is a correct one, we shall, in view of it, be better able to "comprehend, with all saints, what is the breadth, and

length, and depth, and height, and to know the love of Christ, which passeth knowledge."\*—and better to understand other lofty language used by the inspired writers, when speaking of this work of Redemption, considered the greatest of all the works of God.

It will be seen by the table, that a year on the planet Mercury is but 88 of our days; while on Herschel, a year is nearly 84 of our years. Were an inhabitant of Herschel, one year old, to visit our earth, he would, with us, be an old man of 84 years:—and if one should come from Mercury, aged a hundred of their years, he would here be a young man, less than 25 years of age.

We shall now give a more particular account of

the several parts of the solar system.

The Sun. The sun is an immense luminous globe, about 1,400,000 times larger than our earth, It turns on its axis once every 25 days, 14 hovrs, and 6 minutes. Of the sort of matter of which the sun is composed, we know nothing. It is the only, and inexhaustible source of light and heat to the whole system. By his genial beams, he promotes vegetation, cherishes animal life, attracts vapors from the sea, and other bodies of water which from into clouds, and descend in rain to water and re fresh the earth.

The Planets. The names of the planets, in their order as you proceed from the sun, are mentioned in the table. Mercury and Venus move never, the sun than the earth, and are therefore called interior planets. The other four, whose orbits are without that of the earth, are called exterior planets.

The path described by a planet moving round the sun, is called its orbit.

The Earth, Jupiter, Saturn, and Herschel, have each bodies, called satellites, which regularly revolve round them —Of these the Earth has one, which is called the Moon; Jupiter has four, beside a double-belt; Saturn seven, together with a broad circle, called his ring; Herschel has two.

Neither Herschel, nor any of the satellites of the planets, except the Moon, can be seen without the assistance of a telescope, although some of them are supposed to be larger than this earth.

The satellites revolve round their primaries, and attend them in their orbits round the sun, as

the moon does the earth.

Had we eyes of sufficient strength to survey at one view, our whole system in all its parts, and in full motion, how grand and interesting would be the sight!—What then must be the feelings of the Creator, who comprehends with the greatest minuteness, not our system only, but the whole of his immense works, in all their diversified, vast, and sublime movements! The thought prompts the exclamations of the Psalmist—"How manifold are thy works, oh God! in wisdom hast thou made them all! The earth," the universe, "is full of thy glory!"

The planets may be distinguished from each

other by their different appearances.

Mercury emits a bright, white light. He keeps so near the sun, and moves so swiftly, that he is seldom seen, and that only for a short time a little before sunrise, and after sunset.

Venus is the most beautiful star in the heavens; and as she always appears, according to the part of her orbit she is in, either in the east before the sun rises, or in the west after he sets, she is called, when in the east, the Morning, and when in the west, the Evening Star.

Mars is of a red, fiery color, giving a much duller light than Venus, though he sometimes appears equal to her in size.

Jupiter, like Mercury, shines with a bright, white light; Saturn, whose motion is slow, and

hardly discernible, with a pale, faint light.

The planets and their satellites are opaque, or dark bodies, like our earth, and shine only by re-

flecting the light of the sun.

In the Moon, when viewed through a telescope, especially at her increase or decrease, mountains and valleys are evidently perceived; and in April, 1787, Dr. Herschel discovered something like volcanoes in three different parts of it.

From several appearances there is good reason to believe, that the moon is surrounded by an at

mosphere, and is inhabited.

The moon, with respect to the sun, revolves round the earth once in 29 days 12 hours and 44 minutes; thus marking out our months, and rises at the equator about 50 minutes later each day than the preceding. But at the polar circles, the moon rises soon after sunset, from the first to the third quarter; so that the inhabitants of these frozen regions, during the sun's absence, (such is the wisdom and goodness of the Creator,) are supplied with almost constant moon-light, and at the poles the winter moon shines without setting. Thus the moon rules the night.

The point in which the moon is at her greatest distance from the centre of the earth is called her Apoces. The point of her least possible distance

is called her Perigee.

Eclipses. When the moon comes between the earth and the sun, she appears to cover a part or the whole of the sun's body, and the sun is then said to undergo an Eclipse; although, properly

speaking, his rays are only intercepted from that part of the earth on which the moon's shadow falls.

When the earth comes between the sun and the moon, the moon falls into the earth's shadow; and having no light of her own, she suffers a real eclipse, from the interception of the sun's rays. As the shadow of the earth on the moon is round, it proves that the earth must be round.

An eclipse of the sun never happens but at the change of the moon, and of the moon only at full

moon.

Eclipses are of great use in determining exactly the times of past events. Hence Sir Isaac New

ton was led to compose his Chronology.

Eclipses of the moon are also useful in determining the longitude of places; thus, if the eclipse be known to begin or end at Boston exactly at midnight, and is seen at another place at ten o'clock in the evening, the latter place is 30 degrees west of Boston; if at 2 o'clock in the morning, it is 30

degrees east of Boston.

The Comets. The comets, vulgarly called blazing stars, are bodies which move round the sun in long eliptical curves, suddenly appearing, and as suddenly disappearing. They are distinguished from the other stars by a long train or tail of light, which in certain situations resembles a border of hair, and is always opposite the sun.\* The number of them belonging to the system is computed at 450. They were formerly supposed to portend some signal calamity, and people beheld them with terror; but they are now viewed with as little consternation as the planets.

<sup>\*</sup> See the figure of a Comet on the Plate of the Solar sys-

The fixed stars. These make no part of the solar system, but encompass it at an immense distance.

When God created the heavens and the earth, it is also added by the sacred historian, "He made the stars also." Of these about 3000 are visible to the naked eye; and enough more have been discovered by the Telescope, to make it evident that they are iunumerable. How many there are beyond those, out of our sight, in the immensity

of space, none but their Creator knows.

We may form some conception of the amazing distance of the fixed stars, from this consideration; that although the earth, in moving round the sun, is 188,000,948 miles nearer the fixed stars in one part of his orbit, than in the opposite, yet their magnitude and brightness are not in the least altered, and the polar star, in every part of the earth's orbit, appears to us in the same position; hence we conclude, that the whole extent of the earth's orbit is but an imperceptible point, in comparison of the distance of the fixed stars. These stars always preserve the same distance in regard to each other, and are hence called Fixed Stars. They have a twinkling appearance, which distinguishes them from the planets, which shine with a steady light.

The fixed stars are supposed to be at least two hundred thousand times further from us, than we are from the sun. At such a distance they could not be visible to us by any reflected rays of the sun, and of course they must shine by their own

brightness.

The fixed stars have been distributed by Astronomers into certain parcels, called Constellations; to these the ancients gave various names of animals, &c. the reasons of which are involved in fable.

The ancients made 48 constellations, including 1022 stars: 12 constellations, in the Zodiac; 21 north of it; 15 south of it. Modern astronomers have added to these, 14 constellations in the southern region, and one in the northern.

The names of the 12 constellations of the Zodiac, called also signs, with their characters, are

as follows:

Latin Names.	English Names.	Characters
1 Aries	The Ram	do
2 Taurus	The Bull	8
3 Gemini	The Twins	п
4 Cancer	The Crab	
5 Leo	The Lion	R
6 Virgo	The Virgin	m
7 Libra	The Scales	
3 Scorpio	The Scorpion	m
9 Sagiftarius	The Archer	1
10 Capricornus	The Goat	vs
11 Aquarius	The Water Bearer	mu
12 Pisces	The Fishes	×

It is now generally supposed that each of the fixed stars is a sun or centre to a system of its own, which was an opinion of some of the ancients. And there may be some great centre, around which all these systems revolve, as so many planets.

To suppose all these stars to be suns, with planets revolving round them like those in our system, and these again revolving round one common centre, a system of systems, and all filled with inhabitants, how does the mind expand with a pleasing amazement at the grandeur of GOD, who created, who supports, governs, and minutely and continually inspects, the immense whole! Some such view of the heavens as this, led David

to exclaim, "WHEN I CONSIDER THY HEAVENS, THE WORK OF THY FINGERS, THE MOON AND THE STARS WHICH THOU HAST ORDAINED; WHAT IS MAN, THAT THOU ART MINDFUL OF HIM!" What a speck in the works of GOD, is this earth, "When I considered," said Mr. Addison, after he had been viewing the starry heavens, "that infinite host of stars, or to speak more philosophically, of suns, which shone upon me, with those innumerable sets of planets, or worlds, which were moving round their respective suns; when I still enlarged the idea, and supposed another heaven of suns and worlds arising still above this which we behold, and these still enlightened by a superior firmament of luminaries, which are planted at so great a distance, that they appear to the inhabitants of the former as the stars do to us; while I pursued this thought, I could not but reflect on that little insignificant figure, which I myself bore amidst the immensity of God's works; I could not but look upon myself as a being that was not worth the smallest regard of One who had so great a work under his care and superintendency. I was afraid of being overlooked in the immensity of nature, and lost amongst that infinite variety of creatures, which in all probability swarm through all these immeasurable regions of matter."

#### Questions on Section II.

We call the sun, and planets, the Solar System, What does the Bible denominate them?

Of what bodies does this system consist?

What law binds these bodies together and regulates all their motions?

What do modern astronomers call this sys-

tem?
Why is it so called?

Is the Copernican now universally received as

the true system?

Name the Planets as given in the table—their diameters—times of revolution on their axes—hourly motion in their orbits—mean distances from the sun—periodical revolutions.

Which is the largest of the planets?

Which the smallest?
Which nearest the sun?

Which the farthest off?

On which is their year the longest?

On which the shortest?

Is the solar system so independent of the other innumerable systems, as that if it were struck out of existence, it would hardly be missed?

How old would an inhabitant of Herschel, one

year old at home, be on our earth?

How old should we reckon an inhabitant of Mercury, 100 of his years, old, were he to visit our earth, and his age reckoned according to the length of our year?

[Questions of the same tenor may be asked in

regard to all the other planets.]

For what special purpose, probably, did God create this earth and the other parts of the solar system?

If this be so, will it not help to explain the lofty language of scripture, used in describing the work

of Redemption.

How far is the sun from the earth? Of what materials is he composed?

What are the effects of his genial beams?

How often does he turn on his axis?

Which are the interior, and which the exterior Planets?

Why are they so called?

What is the orbit of a planet

Which of the planets have satellites?

How many has each of these?

What have Jupiter and Saturn beside their satellites?

Can Herschel and the satellites of the planets be seen with the naked eye?

How are they seen?

Do the planets all move round the sun, attended by their satellites, all the while revolving round them?

How long is each of the planets in accomplishing its revolution round the sun? [see the table.]

Could we see at one view the whole system in all its parts in actual motion, would it not fill us with astonishment and delight?

Must the Creator feel vastly more, who actually comprehends in one view, not one system only,

but the whole universe all in motion?

How are the planets distinguished from each other?

State their different appearances.

Which of the planets is the morning and evening star?

By what light do the planets shine?

What is said of appearances in the moon?

Is it supposed to be inhabited?

How often does it revolve round the earth?

What division of time does this revolution mark out?

How much *later* does the moon rise at the equator each succeeding day?

What time does the moon rise at the polar cir-

cles?

What is the case at the poles?

By this provision of the Creator, which of his perfections are distinguishingly manifested?

Give an account of an eclipse of the sun and of the moon.

As the shadow of the earth on the moon, in an eclipse, is round, what does this prove?

In what way do eclipses determine the longi-

tnde of different places?

Describe a comet and its course? [See the plate.]

How many are there belonging to our system?

How were they formerly viewed?

How now?

Do the fixed stars make a part of the solar system?

How many have been discovered by the naked eve?

How many in all?

Can their distance be calculated?

What fact shows their distance to be immense?

Does their distance prove that they must, like our sun, have light in themselves?

In what manner did the ancients divide the

flxed stars?

Repeat the Latin and English names of the twelve constellations in the Zodiac.

Is it generally supposed that all the heavenly bodies which we see, are inhabited by intelligent beings?

Does the view here given of the heavens inspire

exalted ideas of the grandeur of God?

What did David say when he had some such view of the heavens?

What did Addison say in like circumstances?

Note.—This, and any other sections, which may be too long for a single lesson, may easily be divided with a pencil mark, by the teacher, to suit his or her convenience.

#### SECTION III.

#### OF THE EARTH.

THE Earth being more strictly the subject of geography, and an account of its creation having been given, we now proceed to give a more par-

ticular description of it.

Its Figure. The ancients in general conceived of the earth as a vast plain, extending an immense' way downward, fixed and established on foundations; and that the sun and the other heavenly bodies actually move round it, as they appeared to do. Our Indians, and other unlearned and uncivilized nations are still of this opinion. An Indian being asked, What does the earth stand upon? answered, Upon an Elephant. On what, said the inquirer, stands the Elephant? On the back of a great Tartle, replied the Indian. On what does the Turtle stand? Ah, that, said the Indian, I can't tell. It is now known that the earth is round from its shadow on the moon when eclipsed, but particularly from the fact, that multitudes have sailed round it.

Its motions. The earth has two motions; one round the sun, in the space of a year, called its annual motion, which occasions the diversity of seasons; the other round its axis, from west to east, called its diurnal motion, in the space of twenty-four hours, which produces day and night. In its annual circuit, the earth moves at the rate of 68,217 miles in an hour. In its diurnal rotation, the inhabitants on the equator are carried 1040 miles an hour. Notwithstanding this swift

and double motion, we appear to be at rest, and imagine that the sun and stars, which are fixed, move round us, and we speak as if this were the case, when we say, the sun and stars rise and set. "The sun riseth, and the sun goeth down, and hasteth to his place where he arose." Solomon.

Its magnitude. The diameter of the earth, as is stated in the table, is 7,928 miles; and its circumference, 24,906. Its whole surface contains

about 199,000,000 square miles.

Its component parts. The globe which we inhabit is composed, according to Moses, of "earth," and "seas," or of land and water, and is therefore called the terraqueous globe. About three fourths of its surface is covered with water, the rest by land. The respective productions of the land and water are given us by Moses in his account of the creation already recited.\* These productions are mostly of a green color, which is the softest and

most grateful to the eve.

Its natural divisions. A late learned and celebrated geographer,† considers the surface of the globe as "one vast ocean," containing an immense number of islands of various sizes. The two largest of these islands are called Continents, the Eastern and Western. The Eastern continent, which was first peopled, is often called the Old World, and the Western the New World, because unknown by civilized nations, till discovered by Columbus in 1492. The Eastern Continent is divided into Asia, Europe, and Africa; the Western into N. and S. America. New-Holland is often considered as a continent by geographers. If it be not so styled, it is the largest island on our globe.

† Malte Brun.

<sup>\*</sup> See the account of the work of the third and fifth days

"There is, properly speaking, only one sea, on our globe, one continuous fluid spread round the land, extending probably from one pole to the other, covering nearly three fourths of the surface of the earth." All the detached portions of water, called seas, lakes, gulfs, &c. are not, (some few excepted.) entirely separated from this "universal sea, which we call the Ocean."\*

This general view of the natural divisions of the earth, is new, and appears to be unobjectionable and important, and is, therefore adopted in this book. I give below the author's "classification," of his new divisions, which is simple and intelligible, and can be easily verified to the understanding of the pupils, by means of an artificial globe.†

\* Malte Brun.

t It would be well to have every school furnished with a globe. A cheap kind, of the size of an ostrich's egg, would be useful, if the expense of a larger one would be too great.

#### CLASSIFICATION OF SEAS.

Ocean, or icv sea of the South.

1. Austral [Its frontier may be fixed by a line. drawir from Cape Horn to the Cape of Good Hope, from thence to Van Diemen's Land, and returning by the South of New Zealand to Cape Horn.

A

Great Austro-Oriental basin or sea.occupying the greatest part of the aquatic hemisphere of the globe.

2 Oriental or Pacific Occan.

- The Great Archipelago, or the part comprised between New Zealand on the south the islands of Marquesas on the east. the island of Formosa on the north, and the straits of Malacca on the west
- Northern Oriental Ocean between Asia and North America The inland seas of Japan and Kamschatka, and the sea of Behring, form a part of it.
- c. Southern Oriental Ocean, from the islands of the Great Archipelago to South America.

3. Indian Ocean.

With its different gulfs. The limits above mentioned mark out what remains for this section. The gulfs of Arabia Persia, and Bengal form a part of it

a. Northern Ocean, Its southern limit ls formed by the department of France, called the Pas de Calais, by Great Britain, the isles of Faroe, and Iceland.

The northern inland seas of Europe, and the northern icv sea, are branches of its

The Western basin. forming a sort of channel between the two great continents

1. Western Ocean.

b. The Atlantic Ocean; from the preceding frontier to the two points where the coasts of Brazil and Guinea approach nearest to each other.

1. The Mediterranean and its gulfs.

Branches. 2. The Gulf of Mexico, &c. 3. Baffin's Bay and Hudson's Bay or the seas of the Esquimaux.

c. The Ethiopic Ocean, between Brazil and Africa, as far as the line from Care Horn to the Capelof Good Hope.

By the computation of M. Brun, the proportion of land north of the Equator, to that on the south, is as 419 to 129: i. e. there is more than three times as much land on the north, as there is on the south of the Equator. For these and other divisions land of and water, consult the map of the world.

fronting the title, Plate No. I.

Mountains. These form the most considerable eminences on the surface of the earth. They are of various sizes, materials, and heights. The Himalaya Mountains, between Thibet, Cashmire, and Nepaul, are the highest yet known. The highest peak in this chain is Dhawalageri, in Nepaul, 27,677 feet above the level of the sea. The next highest are the Andes in S. America, in which Chimborazo, 100 miles S. W. of Quito, rises 21,440 feet above the level of the sea.

Volcanoes. Many of the mountains, which are spread over the earth, are volcanic, or burning mountains, which contain in their bowels sulphur, bitumen, and other combustible matter, the effect of which, when kindled into a flame, is more violent than that of gunpowder, or any thing yet known in nature. As the explosive force of gunpowder arises from the conversion of water into air, that which takes place in volcanoes is undoubtedly from the same cause. Volcanoes may be compared to huge cannon. From their mouths, some of which are a mile and a half wide, are vomited forth dreadful volumes of smoke and flame-torrents of bitumen, sulphur, and melted metals-clouds of cinders and stones-and sometimes rocks of enormous bulk are thrown at a great distance. In the great eruption of Mount Vesuvius, in 1779, a stream of lava,\* of an immense magnitude, is said to have been thrown

<sup>\*</sup>A stream of Lava is the melted matter which issues from volcanoes.

to the height of at least 10,000 feet above the top of the mountain. The quantity of lava thrown out sometimes, is so great as to enter cities, forests, and the ocean in large rivers. Fields have been covered with it, 100 and even 200 feet in thickness. The force of the explosion has been so great as to shake the earth, agitate the sea, and even mountains, and to overthrow the most solid edifices. The ignorant natives of Iceland near Mount Hecla, imagine, that the roarings of the volcanoes of this mountains are the cries of the damned; and its eruptions the effects of the rage and despair of these unhappy wretches.

There are four noted volcanoes, viz. Cotopaxi,

near Quito, in South America; Mount Hecla, in Iceland; Mount Etna, in Sicily; Mount Vesuvius, in Naples. The first of these is 18,898 feet above the level of the sea; and its eruptions are frequent. There are many others of less note in Asia, Afri-

ca and America.

Earthquakes. There are two kinds of Earthquakes; one is caused by the action of subterraneous fires and the explosion of volcanoes, which are felt only at small distances, and at the time when volcanoes act, or just before they open. The other is supposed to be produced by immense quantities of inflammable air, pent up and compressed in the caverns and crevices of the earth, which being greatly rarified by internal fires, and finding no outlet, force a passage through all obstructions.

Earthquakes are usually preceded by a general stillness in the air; the sea swells and makes a great noise; the fountains are troubled and send forth muddy water; the birds seem frightened, as if sensible of the approaching calamity.

The shock comes on with a rumbling noise, like

der; the ground heaves and rolls or rocks from side to side, in many instances. The shocks are often repeated, and succeed each other at short intervals, for a considerable length of time. Awful chasms are sometimes made during the shocks, from which issues water, and in some instances flames. Whole cities have been swallowed up in these chasms, and thousands of people in them. Sometimes persons have been swallowed up in one chasm and thrown out alive through another. Sometimes the chasms have suddenly closed on persons partly sunk, and squeezed them to death, with their heads above ground.

History affords innumerable instances of the dreadful and various effects of earthquakes. In the reign of Tiberius, 100 towns in Lybia near Egypt were overthrown by a great earthquake. In Calabria, in the kingdom of Naples, the town of Euphemia was totally sunk in 1638, and the place where it stood is a dismal, putrid, stinking lake. In 1755 an earthquake laid in ruins a great part of the city of Lisbon. The earthquake which was felt in Canada, in 1663, overwhelmed a chain of mountains of free stone more than 300 miles in length, and the whole of that immense tract was changed into a

# Questions for Section III.

How did the ancients conceive of the earth?

Did they suppose that the sun at other heavenly bodies actually move round the earth, as they appear to do?

Do our Indians still believe this?

plain.

What reply did an Indian once make to one who asked him what the earth s ood upon?

On what did he say the elephant stood?

On what the great turtle?
Of what shape is the earth?

How does this appear?

How many motions has the earth?

What are they?

What does the annual motion occasion?

What the diurnal motion?

In its motion round its axis, which way does the earth turn?

How many miles every hour does the earth move in its annual circuit?

How many in its diurnal motion?

Notwithstanding this double motion, how do we appear to remain?

How do we speak of the sun and stars? How did Solomon speak of the sun? What is the diameter of the earth?

What its circumference?

What the contents of its whole surface?

Of what is the earth composed?

Why is the earth called the terraqueous globe? What portion of the earth is covered by water?

What portion by land?

What account has Moses given us of the respective productions of the earth and the waters?

What is the prevailing color of the growth of

the land?

What is the peculiar advantage of this color? How does Malte Brun, a celebrated geographer, consider the surface of the globe?

What are the two largest of these islands

called?

What is the Eastern Continent denominated?

What the Western?

Why?

Who, discovered the western continent?

When?

What are the great divisions of the Eastern Continent?

What of the Western?

Point to these divisions on the map of the world?

What is New-Holland called?

If it be not a continent, what is it?

Is there, strictly speaking, but one sea on our globe?

Describe it.

What portion of the earth's surface does this sea cover?

What do we call this universal sea?

Are all the smaller portions of water connected with this great ocean?

Is this division of the earth adopted in this book

as the natural and proper one?

Who first noticed and stated these natural divisions of the earth's surface?

In his classification of the seas, what does he

call the division marked A?

What are its sub-divisions marked 1, 2, 3?

Give the limits of the Austral ocean.

Point to it on the map of the world.

Name the three divisions, a, b, c, of the Oriental, or Pacific ocean, and give the limits of each.

Give the limi s of the Indian ocean.

What gulfs form a part of it?

What is the grand division marked B. called, and how is it defined?

What other name is given to it? (See figure 4.) What are the sub-divisions of this Western

Ocean?

Give the limits of the Northern Ocean.

Give the limits of the Atlantic Ocean.

Name its three branches?

What are the limits of the *Ethiopic Ocean?* Point to all these divisions on the map.

On which side of the equator, north or south, is there the most land?

What is the proportion of land on each side of the equator?

What is the name of the highest chain of mountains in the known world?

What is the name of the highest peak in this chain?

Which is the next highest chain?

Give the name of the loftiest peak in this chain?

How far is this peak from Quito?
In what direction?

#### SECTION IV.

THE EARTH -- CONTINUED.

# Natural History.

The earth, says Dr. Goldsmith, is placed at a happy middle distance from the centre of the system, and is privileged beyond all the other planets that depend on the sun for their support. The interior planets, Mercury and Venus "are situate too near the violence of its power" the exterior planets, Mars, Jupiter, Saturn and Herschel, feel less of his kindly influence; while "the earth seems, in a peculiar manner, to share the bounty of the Creator: it is not, therefore, without reason that mankind consider themselves, as the peculiar objects of his providence and regard."

In the last section was given elementary ideas of what is called *Physical* or *Natural* Geography; by which we understand a knowledge of this earth, simply considered—of its figure, size, motions, component parts, natural divisions, and of the common. and the remarkable appearances of nature pertaining to it. The bodies on the surface of this earth, and in the seas, or "the various productions of nature,—their properties, manners and relations which they bear to us and to

<sup>\*</sup> Goldsmith

each other," which is called "Natural History," with other things pertaining to the earth, as it came from the hands of the Creator, are now to be considered.

Animate bodies include all such as have the properties of sensation and voluntary motion, which are divided into a great many classes, 1. Man, Quadrupeds or four footed beasts, whales, and some other sea animals, who suckle their young ones, are called viviparous animals. 2. Those animals that lay eggs and hatch their young ones, are called oviparous; such are birds, serpents, alligators, lizards, tortoises, &c. 3. Frogs are placed by naturalists among mixed animals, as partaking of beast and fish. 4. Insects and worms are distinguished by the name of animals—with colourless blood.

That science which teaches the structure of animal bodies by dissection, is called Anatomy. A description of quadrupeds, Zoology,—of birds, Ornithology,—of fishes, Ichthyology,—of insects, Entomology,—of worms, Helminthology,—of animal bodies in their several parts, Physiology.

INANIMATE bodies are either organic, as are all vegetables; or inorganic, as are all other inani-

mate bodies.

Vegetables have many properties common with animals: They are all propagated by seeds, which very much resemble the eggs of oviparous animals; and they are of different sexes, male and female; but they are distinguished from unimals, by the want of voluntary motion.

All trees, shrubs, herbs, grasses, mosses, ferns,

flags, and sea weeds, &c. &c. are vegetables.

From Animals are obtained, beside their flesh and skins, milk, cream, butter, cheese, eggs, honey,

wax, tallow, silk, wool, hair, horn, &c.

From Whales, spermaceti, of which candles are made, whalebone, and oil or blubber, used by tanners. The ocean, seas, lakes, and rivers, yield a great variety of fish, oysters, clams, lobsters, &c. which afford a delicious food, a rich article of commerce, and constitute the chief subsistence of multitudes of poor people.

From Vegetables are obtained, from their juices naturally, or by distillation, gums, resins, (by some very improperly called rosum) balsams, turpentine, tar, sugar. From their seeds—meal, flour, oils, &c.

They furnish materials for dying all the various

colors.

Cider is produced from apples; perry from pears; wine from grapes and currants; vinegar from wine, cider, beer, and all fermented liquors; brandy from wine and peaches; gin or geneva from rye; whiskey from various kinds of grain; rum and sugar from molasses; molasses from the juice of the cane; beer from barley made into malt, also from hops, spruce, and other vegetables; snuff from tobacco, &c. maple sugar and molasses from the sap of the maple-tree.

Waters. Water is a compound of vital and inflammable air, in the proportion of 85 parts of the former, to 15 of the latter. Others say, water is a compound of fire and ice. Not only dew, rain, or snow, and meteors, but all animals and vegetables, says Sir Isaac Newton, grow from water, and after putrefaction, return in part to water again. "Out of the waters God created the moving creature

that hath life, and fowl that may fly above the

earth, in the open firmament of heaven."\*

Rain water, is, perhaps, the most pure, being in fact water distilled by nature. The water in wells is impregnated with various matters, according to the different earths or minerals, through which it passes in its way to the springs which feed the well.

Springs are of various kinds. Some are very hot, others extremely cold. They are all more or less impregnated with salt, sulphur, metals, earths, and airs of different kinds, which render them medicinal, in many diseases. Sea or salt water is heavier than fresh, in proportion to its saltness.

Salt. Salt is extracted from salt water, obtained either from the sea, or the salt springs in the interior country, of which there are many, in dif-

ferent parts of the world.

Salt is also found in large masses in pits below ground, called rock salt. There is a curious pit of this kind in Poland. Salt springs, wherever found, it is supposed, pass through, and are impregnated by beds of salt. The island of Ormus, at the bottom of the gulf of that name in Asia, is nothing but white hard salt, of which the inhabitants make the walls of their houses. There is not one spring of fresh water on the island, though it once (1622) contained 40,000 inhabitants.

Tides. The Tides are produced partly by the attraction of the sun, but chiefly by that of the moon. The flux and reflux, or flowing and ebbing of the tide, take place twice every 24 hours and 50 minutes, which is a complete lunar day, or the

<sup>\*</sup> See the work of the fifth day, p. 10.

time of the moon's apparent revolution round the earth from the meridian to the meridian again.

When the tides are higher than ordinary, they are called *spring tides*; when lower than ordinary, neap tides. Both kinds happen twice in every month: The former at new and full moon, the latter when the moon is in quadrature, or its first and last quarter.

The tide rises different heights in different places. At the mouth of the river Indus, in Asia, it rises 30 feet. In the Bay of Fundy, in New-Brunswick, it rises from 50 to 60 feet, and flows so rapidly, as to overtake and overwhelm animals

that are fleeing from it.

Having given some account of what is in and upon the earth, I will now describe what is above it; viz. the Air, Heat and Cold, Light, Winds, and Clouds. With a short account of these, the subject of Physical or Natural Geography will be concluded.

Air. Air is that invisible fluid with which this Globe is surrounded, on which depends the life of man and all other animals, the conveyance of all sounds, and the growth of all vegetables.

The science which treats of Air is called PNEU-

MATICS.

The whole body of air is called the Atmosphere. Its height has been generally supposed to be about 45 miles; but it is now found that it cannot be ex

actly ascertained.

Beyond the Atmosphere, and extending through the immensity of space, is, in the opinion of Mr. Locke and Sir Isaac Newton, a rare fluid, or species of matter, infinitely more pure and subtle than the air we breathe, called ETHER. The weight of the Atmosphere upon every square inch of the earth's surface, is found, by experiments made by the Air pump,\* to be 15 pounds. It is computed that a middle sized man, whose body contains about 15 square feet of surface, is pressed by 32,400 pounds of air, all around. But because this enormous weight is equal on all sides, it is not in the least degree felt by us.

The air is commonly said to be heavy when it is thick and foggy; but it is then thinner and lighter

than usual.

The air is expanded by heat, and condensed

or compressed by cold.

Air is the proper vehicle of sound, and necessary to give us the sense of hearing. Where no air is, there can be no sound. Without air we should have no music, no smell, no light, nor should we be able to converse with each other. All sounds, whether loud or soft, move about 13 miles a minute.

The strength of sound is greatest in cold and dense air, and least in that which is warm and rarified. Sounds have been heard, in cold countries, nearly 200 miles; in warm, above 100 miles.

Two inseparable qualities of the air, are HEAT

and Cold.

Heat. Heat is the sensation caused by the approach or touch of fire. By it most bodies are expanded and enlarged in their dimensions; fluid substances are carried off in vapor; solid bodies become luminous, and are likewise dissipated; or,

<sup>\*</sup> The Air pump is a machine invented by Gueric, a Prussian, about the year 1672, and improved by Boyle and others in England, and lately the Rev. Dr. Prince, of Salem in Massachusetts.

if incapable of evaporation, become fluid, and at last are vitrified, or converted into glass.

Animal and vegetable life are thought to depend on heat; and by it the most important operations

in nature are performed.

Wild fire, a composition invented by one Callinicus, which burns with the greatest violence under water, is supposed to consist of sulphur, pitch, gum, bitumen, &c. With this fire the Greeks, in the year of our Lord 660, are said to have burnt the whole Saracen fleet, in which were 30,000 men.

Cold. The cause of Cold is as uncertain as the nature of fire. Some maintain that it is only the absence of heat; others that it is a real substance. Cold, when increased to a certain degree, produces in fluids, congelation or freezing. Different degrees of cold are requisite for the freezing of different fluids. Water, (next to oils, fat, &c.) congeals with the least degree of cold; then vinegar, wine, brandy, spirits of wine, and last of all, mercury, or quicksilver.

The instrument made use of in measuring the different degrees of heat and cold in the atmos-

phere, is called a Thermometer.

The action of freezing is always instantaneous. Ice is lighter than the same bulk of water, and this is the reason of its floating on the surface. Boiled water is more easily frozen than that which has not been boiled; and that which is a little agitated, than that which is entirely at rest.

In 1740, a palace was built of ice at Petersburg, in Russia, 52 feet long, and 20 feet high. Even cannon were made of it, from one of which, a ball was discharged through an oak plank, two

inches thick, at the distance of 60 paces; and the cannon did not burst with the explosion.

Light, as defined by Sir Isaac Newton, rather obscurely, is that quality or action of the transparent medium by which we see. The truth is, the nature

of light is very little known. We can only know its properties and effects.

The rays of light fly with amazing swiftness, at the rate, it is computed of 11,875,000 miles in a minute, or more than a million times swifter than a cannon ball, which is computed to move 8 miles in a minute. Light is found to proceed from both animal and vegetable substances in a putrid state.

That appearance called Ignis fatuus, Will with a Wisp, or Jack o'lanthorn, seen commonly in damp places, in burying grounds, and near dunghills, and which has so often frightened people, is of the same nature as the light produced from putrid substances. Newton calls it a vapor, shining with-

out heat.

The rays of light proceeding from the sun, are of seven different colors; red, orange, yellow, green, blue, indigo, violet. These are called primary colors, and form the rainbow; and by a proper mixture of these, all other colors are

produced.

The Northern Light, called the Aurora Borealis, a phenomenon unknown to the ancients, is supposed to proceed from electrical matter in the atmosphere. This remarkable phenomenon or appearance, was first observed in London, in 1560. Since the year 1716, it has been more frequent. It gave great alarm to the people in New-England about 80 years ago, when it was first discovered. They believed that the world was about to be set

on fire, and the day of judgment to commence. It is now viewed with unconcern.

Winds. Wind is air in motion, and is occasioned chiefly by the variations of heat and cold, by which the air is either rarified or made thinner, or condensed, or made thicker. If the air by any means is more rarified, or rendered lighter in one place than another, the denser or weightier air will rush in from all parts, to restore the equilibrium. If these currents are furious and violent, they are called hurricanes, gales of wind, and storms; if strong and uniform, winds; if gentle, breezes, or soft gales.

The winds, in a space of about 30 degrees north of the equator, in the open sea, and less on land, blow constantly from the north-east; and in a space of the same extent south of the equator, from the southeast. These are called the Trade Winds.

In the Indian ocean, the trade winds blow one half the year from the south-east or north-east, and the other half from the opposite quarters. These are called Monsoons.

On the ocean the winds are more regular than on land, because the temperature of the sea is more equal than that of the land. The winds are more violent in mountainous places, than on plains.

When from sudden rarefication, or any other causes, contrary currents of air meet in the same spot, a Whirlwind is the consequence. A Water Spour is no other than a whirlwind at sea.

Manifold are the good effects of wind. It purifies the air, moderates the heat, conveys the clouds from one place to another, dries wet lands and damp houses, chases away the fogs, promotes vegetation by the motion it gives to trees and

plants, and aids navigation and commerce, by which the inhabitants in different and distant parts of the world have intercourse with each other.

The velocity of the wind, at a height from the earth, free from obstruction, has been calculated as follows; a strong wind 61 miles an hour, a brisk gale 21 miles, a gentle breeze about 9 miles.

Clouds. From the watery vapors raised by the heat of the sun, from the sea and other waters, and from the moist surface of the earth, are formed, the Cloubs, which being condensed by cold, descend in rains, fogs, and dews.

The RAINBOW, with its beautiful colors, is produced by the rays of the sun, shining upon the

falling drops of rain.

When the watery particles are frozen in the atmosphere, they descend in Snow, Hall, and Hoar Frost.

In Peru, Egypt, and the island of Madeira, it seldom or never rains; and in some places under the equator, it is said to rain for one half the year, and to be fair the other.

Clouds highly charged with electricity or lightning, in southern climates, sometimes produce the most fatal effects. A cloud of this kind, in the island of Java, in the East Indies, August 11, 1772, descended on a mountain in the night time, and destroyed every thing near the top of it; about 2,140 people, and a vast number of cattle were killed by it. Another cloud of the same kind, at Malta, an island in the Mediterranean sea, Oct. 29, 1757, destroyed many houses and ships, and about 200 people.

The height of clouds is not very great. The

them; as Etna, the Alps, the Andes in South America, and many others. Hence, from the tops of these mountains a person may, in perfect security, hear the thunder roll, and see the streaks and flashes of lightning darting over the clouds far below him, which affords one of the most sublime and awful scenes in nature.

Lightning and thunder, which fill us oftentimes with so much terror, have their use: and so have the snow and frosts. The lightning promotes a circulation of the air, and cools the sultry heat of summer. Snow prevents the frost from penetrating too deep into the earth; it facilitates travelling, by making a soft and smooth bed over rough ways; makes a good manure for the ground; and by its whiteness diminishes the darkness of long winter nights. Frost kills the seeds of disease which float in the air, or lie upon the ground; it braces and strengthens the animal frame; mellows and fertilizes the ground; destroys hurtful insects and worms; it also facilitates travelling over rivers, ponds, and lakes, and low swampy grounds, which without it would be impassable.

Thus, "Fire and hail, snow and vapor, fulfil

the word of the Lord."

# Questions on Section IV.

Is the earth, according to Dr. Goldsmith, "privileged beyond all the other planets, by its happy middle distance from the centre of the system?"

What is said of the interior and exterior plan, a in this respect?

What, of the earth?

Is it with reason, that mankind consider themselves as peculiarly favored in regard to the situation of the dwelling-place which the Creator has allotted to them?

What science was considered in the last sec-

tion?

What are we to understand by *Physical Geography?* 

What science is the subject of this section? Give Goldsmith's definition of Natural History!

Define animate bodies!

Into how many classes are they divided?

Who are included in the first class?

What are they called? Why are they so called?

Name the second class, and why so named?

The third—the fourth.

Define the science of Anatomy?

What is Zoology?

What is Ornithology?

What is Icthyology?

What is Entomology?

What is Helminthology?

What is Physiology?

How are inanimate bodies divided?

What properties have vegetables in common with animals?

By what properties are they distinguished?

What productions of the earth are called vegetables?

What are obtained from animals, besides their flesh and skins?

What from whales?

What do the ocean, seas, lakes, and rivers produce for the use of man?

What are produced naturally, or by distillation, from vegetables?

What else do they furnish?

From what is Cider made? Perry? Wine? Vinegar? Brandy? Gin, or Geneva? Whiskey? Rum and Sugar? Molasses? Beer? Snuff? Maple Sugar?

What is Water?

What does Sir Isaac Newton say of this element?

What does Moses say on this subject?

What is said of rain-water?

What of well-water?

What of Springs?

Which is heaviest, salt or fresh water?

How is salt produced?

Where is the rock-salt found?

What is said of the island of Ormus?

How many inhabitants lived on this island in 1662?

How are the *Tides* produced? How often do they *ebb* and *flow?* Define *spring* and *neap* tides?

How often, and in what state of the moon do

these happen?

How high do the tides rise in the river Indus?
How high in the bay of Fundy, and what effects sometimes follow?

What are next described, as above the earth?

What is Air?

What is the science called which treats of air?

What is the whole body of air called?

What is the supposed height of the atmosphere?

What, in the opinion of Mr. Locke and Sir I. Newton, is beyond the atmosphere, in infinite space?

What is this fluid called?

What is the weight of a square inch of the atmosphere?

By what instrument is this ascertained?

How many pounds of the atmosphere press upon a middle sized man?

Why is he not crushed by this enormous

weight?

In thick foggy weather is the air lighter or heavier than usual?

What are the effects of heat and cold on the

Is air necessary to sound and hearing?

What would be the consequences, if the air should be removed?

How many miles in a minute do sounds move?

Is the strength of sound greatest in cold or hot weather?

How far have sounds been heard in cold weather?

How far in warm?

What are the qualities of the air? Describe heat, its effects, and uses!

Of what is wildfire supposed to consist?

Who invented it?

Where does it burn with the greatest vio-

What did the Greeks once effect by its use?

When did this event happen?

What is said of the cause of cold?

What are its effects on fluids?

What fluids are congealed with the least degree of cold?

What next?

What last of all?

What is a thermometer, and its use?

Is the action of freezing instantaneous?

Which is heaviest, ice or water?

Which freezes soonest boiled or unboiled water?—Water that is agitated, or that which is at rest?

Was a palace of ice once erected?

Where?

When?

Of what length and breadth?

What is said of a cannon made of ice, and of its effects?

What is Light?

Do we know any thing more about it than its properties and effects?

How many miles in a minute do the rays of

light fly?

How much swifter is this than the motion of a cannon ball?

From what substances is light produced? State what is said of the Jack o'lantern!

Name the seven primary colors which form the rainbow!

Are all other colors formed from various mixtures of these?

Whence proceeds the Northern Light, or Aurora Borealis?

When was it first observed in London?

How long ago in New-England?

What was then thought of it?

How is it now viewed?

What is wind, and how is it produced?

When the currents of the wind are furious and violent, what are they called? If strong and uniform? If gentle? If soft?

Describe the Trade-winds!—The Monsoons!
Are the winds most regular, on the ocean, or

on the land?

Why?

In which are winds most violent, in mountainous or plain countries?

How are whirlwinds produced?

What is a water-spout?

What are the good effects of wind?

How swift do the various kinds of wind move?

How are the clouds formed?

What do they produce when condensed by cold?

How is the rainbow formed?

When watery particles are frozen in the atmosphere, what follows?

In what places is there no rain?

State the effects produced by lightning, and name the places where, and the time when these effects happened!

What is the height of the clouds?

Are the tops of high mountains above them?

Describe the situation and prospects of a person standing above the clouds, and looking down on them, during a thunder-storm!

State the benefits of lightning and thunder-of

snow and frost.

What does the Psalmist say of "Fire and hail snow and vapor?"



tude; all south, in south latitude. From top to bottom, or north to south, meridians, or lines of longitude are drawn. Longitude in the United States begins at the meridian which passes through the city of Washington, our capital.\* All places west of this line are in west longitude; all east of it in east longitude. The degrees of latitude are marked on the sides of the map; of longitude on the equator, and top and bottom of the map. A degree (°) is 60 geographical, or 69½ English miles.

The natural divisions of the earth have already been given, page 28 to 31, which should here be re-examined. The pupil may derive from an inspection of the map, a better and more correct idea of a continent, island, peninsula, isthmus, promontory, or cape; of an inland sea, bay, lake, harbor, &c.; of the two tropics, polar circles, and other circles on the globe, than can be given by any description in words. It will be a useful exercise also to require the pupil to define in his own language, a continent, island, circle on the globe, &c. after looking at each on the map.

[Note.—In Geography Made Easy, or the abridgement of the American Universal Geography, the next book to be put into the hands of the pupil after this, in order to obtain a systematic and thorough knowledge of Geography, will be found a more full and complete account of the topics concisely treated in this and the two preceding sections, and to that work Preceptors are referred.]

This section containing what we have now to say of "the heavens and the earth," as the dwelling- place of man, will be concluded with

<sup>\*</sup> Most of our maps have London, or Greenwich, in England, as there first meridian, as well as Washington. One at top, the other at bottom.

The divisions of time. Time commenced at the creation of the world, and will end at its destruction. Then "time will be no more."

The ancients, for certain purposes, divided the whole period of the world's existence, into " seven ages."

1. The first age of the world began at the creation, and ended at the flood, 1656 years.

2. The second was reckoned from the flood, to the call of Abram and his settlement at Haran, 426 years.

3. The third, from the call of Abram to the release of the children of Israel from the bondage

of Egypt, 430 years.

4. The fourth, from the time the children of Israel left Egypt, to the building of the temple, 479 years.

5. The fifth, from the building of the temple, to the fall and degradation of the proud Nebuch-

adnezzar;\* 443 years.

6. The sixth, from the fall and destruction of Nebuchadnezzar, to the birth of Jesus Christ,

566 years.7. The seventh age of the world embraces the whole period, from the birth of Christ to the end of the world; a period, it is supposed, of 3000 years; making in the whole 7000 years, which the world is to continue in existence.

There are other divisions of time marked out by the motions of the heavenly bodies, into days, months, and years; also into day and night, summer and winter, spring and autumn, seedtime and harvest.

<sup>\*</sup> Daniel iv. 29, 34.

# Questions on Section V.

What is a map?

How is the land distinguished from the water?

How are rivers described?

How mountains, forests, roads, swamps and morasses, sandbanks, and shallows, chief cities, towns, forts, light-houses, course of winds?

What point of the compass is the top of the

map, and by what is this point denoted?

What point the bottom?

What the right, and what the left hand?

What are the lines called which are drawn from top to bottom of the map?

What those from side to side?

Point on the map, of the world No. I. to the north and south poles, to the Zenith and Nadir, the Equator, and describe them.

Whence is latitude reckoned?

What are meridians, and how are they drawn on maps?

Through what city does our first meridian

pass?

Is longitude reckoned east and west from this line?

What is the length of a degree in geographical

and in English miles?

Look at plates No. IV. and I., and point to a continent, island, peninsula, isthmus, promontory or cape, to an inland sea, bay, lake, harbor; to the tropics of Capricorn and Cancer, and the polar circles?

When did time begin, and when will it end? Into how many ages did the ancients divide the whole period of time?

When did the first age begin and end? How many years did it embrace? When did the second age begin and end? How many years did it embrace? When did the third age begin and end? How many years did it embrace? When did the fourth age begin and end? How many years did it embrace? When did the fifth age begin and end? How many years did it embrace? When did the sixth year begin and end? How many years did it embrace? When did the seventh age begin and end? How many years is it to embrace? How long is it supposed the earth and heavens will exist from their creation?

What other divisions of time are there?

How are these marked out?

#### SECTION VI.

THE CREATION, CHARACTER, AND INHERITANCE OF MAN-MESOPOTAMIA, AND THE RIVERS AND PLACES WITHIN AND ROUND ABOUT IT, WHICH ARE MENTIONED BY MOSES.

The manner in which Moses has described the creation of "the heavens and the earth," obviously shows, that they were intended to be the magnificent dwelling-place of some exalted race of beings, favorites of their Creator. This magnificent dwelling-place, in its several parts, has been described, and we return again to give a more particular account of the origin and character of that race of beings, who were to inhabit it,

and of the region where they first dwelt.

In the account already given of the work of the sixth day,\* we are informed of the creation of man, and the formal consignment to him of the inferior creatures, and of the whole furniture of the earth, as his inheritance, to be used and governed by him as its lord, according to his pleasure. Further particulars relating to the creation of man, the place on the earth where he was formed and destined to live, are given by Moses, which here claim attention. The additional facts concerning the creation of man related by Moses are these—"And the Lord God formed man of the dust," or mould, "of the ground and breathed

into him the breath of life, and man became a living soul." "And the Lord God said, It is not good that man should be alone, I will make an help meet for him." "And the Lord God caused a deep sleep to fall upon Adam, and he slept; and he took one of the ribs and closed up the flesh instead thereof. And the rib which the Lord God had taken from man, he made," or builded "a woman, and brought her unto the man. And Adam said, This is now bone of my bones, and flesh of my flesh, she shall be called Woman, because she was taken out of Man; and they shall be one flesh."

We have a further account of the exalted rank held by man, among the creatures of God, and of the formal consignment to him of the earth and heavens which he had created, and all their furniture, as his inheritance, in the 8th Psalm. "Thou, oh Lord, hast made man a little lower than the angels, and hast crowned him with glory and honor. Thou madest him to have dominion over the works of thine hand; thou hast put all things under his feet."

It will be proper here to introduce some account of the traditions of several of our Indian nations, respecting the creation of man. Though their ideas on this subject are wild and fanciful, yet their accounts have a striking similarity to that given by Moses, of which they must have retained some traditionary knowledge.

The following was communicated to Major Marston, by Masco, a chief of the Sauks, a tribe of Indians on the Mississippi river; and by Major

Marston to the author.

"The Great Spirit, in the first place created from the dirt of the earth, two men; but finding that these alone would not answer his purpose, he took from each man a rib, and made two women; and from these four sprang all red men.

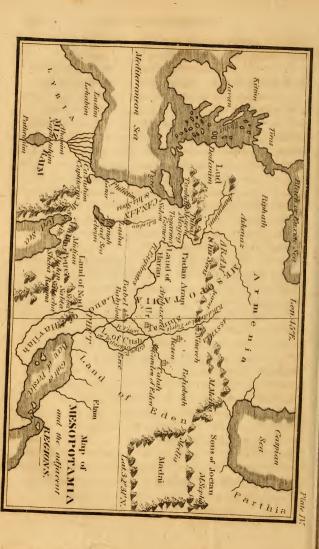
"The white men were made of the fine dust of the earth, as they know more than Indians."

Another account given by a chief of the Iroquois, is summarily the following:

"After the Great Spirit had formed the world, he made the birds and beasts. He then made man; but having formed him white, and very imperfect and ill-tempered, he placed him on one side of the earth where he now inhabits. As the Great Spirit was not pleased with his work, he took of black clay and made the Negro. This was much better than the white man, but was still imperfect. He then procured a piece of red clay, from which he formed the Red Man perfectly to his mind. He placed him on a great island, separate from the white and black men, and gave him rules for his conduct, promising him happiness in proportion as he should obey them."

For the progenitors of the human race, named Adam and Eve, "the Lord God planted a garden eastward in Eden," and as its name imports, "it was the centre of every terrestrial pleasure. The munificence of the Creator stored it with every plant, and tree, and flower, that was pleasant to the eye, grateful to the smell, and adapted to the sustenance of sinless man. A river went out of Eden to water it, whose ample and refreshing streams, so necessary to the very exist ence of an oriental garden, visiting every part of the sacred enclosure, diffused a perpetual verdure, and imparted to every plant a beauty, vigor, and





fertility, perhaps unknown to any other district of

that delightful region."\*

After all the investigations of learned visiters of this interesting region, and of commentators on their works, we have no certainty as to the precise situation of this Garden of Eden. After as full an examination of the subject as very ample means have furnished, I have located this garden as may be seen on the map. The land or country called Eden, in which the garden of this name was placed, lay, according to Moses, on the banks of a large river, which on leaving the southern limit of that country, divided into four heads, or four rivers, here uniting their waters, which had the names of Pison, Gihon, Hiddekel, and Euphrates. Different authors lay down these rivers on their maps variously. There is no certainty that any of them are correct. The little map in this book is compiled from the latest and best authorities, and gives sufficient information for our purpose.

We have placed the Garden, as will be seen in the map, "on an eastern branch of the Euphrates, as laid down in Shuckford's map, which after it leaves the Garden receives from the north the Hiddekel or Tigris. "That is it," saith Moses, "which goeth towards the east of Assyria," or, as it should properly be rendered, before, or over against Assyria, as this river washed its western border." From this junction of these two rivers, there issued towards the east, the Gihon, "which compasseth the whole land of Ethiopia," or Cush, as it is rendered in the margin of our Bibles. From the same source, toward the south-west,

<sup>\*</sup> Paxton, Vol. p. 7 and 8.

<sup>†</sup> Paxton.

issued the Pison, "which compasseth the whole land of Havilah." The Euphrates and Hiddekel, or Tigris, are as described on the map.

#### MESOPOTAMIA.

Though some have located the Garden of Eden and the places which Moses has connected with it, in Syria, and others in India, far toward China, I think there is little doubt that it was in Mesopotamia, (which signifies between two rivers,) and near the spot where it is placed on the map. Admitting this to be fact, Mesopotamia, though little known in Geography, is in truth, the most inter-

esting part of our globe.

Boundaries. Mesopotamia on the north, in its largest extent, embraces the southern part of what is now called Armenia. On the east it was bounded by the river Hiddekel or Tigris, which separated it from Assyria, whose capital was Nineveh. On the south was the land of Cush, Chaldea, or Eastern Ethiopia, several names given to the same tract of country, which separated it from the Persian Gulf. According to late information from Mr. Wolf the Missionary, its southern boundary extends to the Persian Gulf. Its western boundary was the Euphrates, which divided it from that celebrated portion of the globe, which God gave to Abraham and his seed after him, called the Holy Land, the Land of Promise, and the Land of Israel. Mesopotamia lies between 30° and 38° N. lat. and between 40° and 50° E. lon.

General Observations.—On various accounts this neglected country claims the particular attention of geographers. Here man was created and lived in the garden God prepared for him, during the short period of his innocency;

here he sinned and fell, and was driven from the garden, and the earth was cursed for his sake. Here the first children of the human race were born, Cain and Abel; and the first murder was committed, a crime which there is reason to believe was predominant among the antediluvians. Here the ark was built by Noah, of gopher or cypress wood, and on or near its northern border, it rested on Mount Ararat, which is "always whitened with snow."\*

Here Babel was built about 100 years after the flood,† and the language of its builders confounded. "Till this time, nearly 2000 years after the creation, there was but one language spoken by mankind." This country was the centre from whence "the Lord scattered mankind abroad upon the face of all the earth," forming the seeds of the different nations.

\* M. Brun.—"It is probable that the ark rested on the Mountains of Ararat in Armenia, one of the summits of the Gordian range, which rising to a stupendous height above the rest of the chain, overlooks the rich and extensive plains

of Babylonia "-Paxton.

† About 100 years after the flood, Eber had a son born, whom he named "Peleg, because in his time the earth was divided," i. e. the language of mankind was confounded, and they in tribes, composed of those who spake the same language, began to be dispersed in the earth. The number of languages which arose from the confusion at Babel, from the words of Moses, (Deut. xxxii. 3.) has been supposed to be 70. "When the Most High divided to the nations their inheritance, when he separated the sons of Adam, he set the bounds of the people according to the number of the children of Israel," i. e. "he divided them into 70 nations, which was the number of the children of Israel," The Greek and Latin fathers make them 72.—Struckford, Vol. I. p. 97.

In this country the first towns and cities were built, and the first kingdoms were established. Bordering on this country to the west, in the east-ern part of the thirsty, barren deserts of Arabia Petræ, lay the land of Nod, the place of Cain's exile, and the scene of his wanderings after the murder of Abel, a region admirably adapted to the purpose of his punishment.\* In this country, called in the Hebrew, Aram Naharaim, was "Ur of the Chaldees," where Abraham, "the renowned founder of the Hebrew nation,† was born, and whence by divine direction he migrated with Lot his nephew, to the destined future inheritance of himself and his posterity. Here dwelt Chedarlaomer, king of Elam, and the other kings who fought with the king of Sodom and the other kings of the plain, and took Lot, who was rescued by Abraham. Here Jacob lived with Laban, and here were born the twelve patriarchs, sons of Jacob, who gave their names to the twelve tribes of Israel; also, Sarah, Rebekah, Leah, and Rachel, the wives of Abraham, Isaac, and Jacob. It was here, in aftertimes that Alexander the Great, gave the fatal blow to the powerful monarchy of Persia; and here in still later periods, Trajan, Julian, and Heraclius, at the head of the Roman legions, encountered in a number of bloody battles, the invincible squadrons of Parthia.

## Questions on Section VI.

What were the heavens and the earth intended

by their Maker to be?

Did God give the dominion of the world, after he had finished it, to man as its lord and proprietor?

<sup>\*</sup> Grotius, Paxton, † Paxton, † Gen. xiv.

Of what was man made?

Of what was woman made, and in what manner?

What did Adam say when Eve was brought to

him?

Do the manner in which man was created, and the splendid dwelling-place which his Maker prepared for him, show his exalted rank among his creatures?

What does the Psalmist say on this subject?

State what our Indians think of the origin of our race—first what Masco the Sauk Chief, has said, then the account given by the Iroquois Chief.

What did God do further for the particular ac-

commodation of Adam and Eve?

Describe this garden.

Point to it on the map, and to the four river's mentioned in the Bible, as connected with this garden.

What is the name of the country which con-

tained this garden and these rivers?

Describe the boundaries of Mesopotamia?

What country lies north of it?

What east?

What river separates it from Assyria?

Point to the capital of Assyria, and state what is said of it by the prophet Jonah.

Give the southern boundary of Mesopotamia,

and point to the places named on the map.

What river forms its western boundary?

From what country does this river separate Mesopotamia?

On what accounts does this country claim our

particular attention?

[Here it will be easy for the teacher to supply the questions, which shall draw from the pupil all the facts contained under the head of "General Observations," as,

Where was man created?

Where did he live while he remained innocent?

Where did Noah build the ark?

On what mountain did the ark rest after the flood?

In what range of mountains is Ararat supposed to be situated?

Point to it on the map.

What is said to lie perpetually on its top? What plains does this mountain overlook?

Where was the land of Nod to which Cain was banished after he slew his brother Abel?

Point to it on the map and describe the country.

How long after the flood was Babel built, and the language of its builders confounded?

How many languages arose out of this confusion?

And so of the rest,

#### SECTION VII.

MESOPOTAMIA, CONTINUED.

The Geological Features and Character of this Country.

THESE are very peculiar and striking. What they were before the fall of man, or before the flood, Moses, our only authority, has given us no particular information. As it was the spot on the globe selected by God himself to be the dwellingplace of man, whom he had made in his own image, we may presume that it originally combined every thing, as to its local and relative situation, climate, soil, productions, &c. which could render it an abode of perfect enjoyment. The curse and the flood have obviously produced sad and awful changes in the character of this interesting region, though we cannot particularly describe them, because we cannot compare its present with its original state. It is very remarkable for situation, in the very centre of the habitable earth, and by its navigable rivers and vicinity to internal seas and the Great Indian Ocean, it has easy access to all parts of the world. It bor-. ders on the favored country which God selected and gave to his chosen people. The late geo-grapher,\* before quoted, has given the following

striking account of Mesopotamia, including Armenia on the north, and Irac Arabia on the south west. "There are few countries on the globe, where, in so small a space, so many striking contrasts are found united. Within an extent of ten degrees of latitude, we have at Bagdad a heat equal to that of Senegambia (in Africa,) and on the summit of Ararat, eternal snows. The forests of firs and oaks in Mesopotamia, join those of palms and orange-trees. The roarings of the lions of Arabia echo to the howlings of the bears of Mount Taurus. We might indeed say that Africa and Siberia had here given each other a meeting. This near approach of climates so opposite, principally arises from the great differences which are found in elevation. Armenia, which is a very elevated plain, is encompassed on all sides by lefty mountains."

A large portion of the southern part of this country is now a desert, a continuation of that of Arabia, on whose burning sands grow, "in detached spots, at great distances, saline plants." Immense tracts are covered with wormwood. The scanty supply of water found here is generally bitter or brackish. The lakes are stagnant, saltish, and putrid, whence arise those exhalations which, when put in motion, create that fatal wind called the Samoom or Samiel. When this dreadful wind rises, the sun seems covered with blood, from the dust which is raised to an immense height. Animals, to escape its fatal effects, instinctively lay themselves flat on the ground: it suffocates any living being exposed to its in-

Auence.\*

In the northern parts of Mesopotamia, about Diarbekir, are mountains of moderate height, interspersed with pleasant and rich valleys, well watered, yielding grapes, olives, melons, and other fruits; tobacco, silk, wool, &c.; mines of gold and silver, and particularly of copper, are found in this region. The forests of gopher or cypress wood and other trees, which supplied Noah with timber for the ark, and afterwards Alexander and Trajan for the building of their fleets, are yet to be seen, diminished in number and size. on the banks of the Tigris. The ancient city of Diarbekir, has 40,000 inhabitants living in 8,000 houses, built of lava. The city of Merdin, most extraordinary for its situation, lately visited by Mr. Wolf the missionary, has 3,000 houses, and about 15,000 inhabitants. It overlooks the extensive plains of lower Mesopotamia. "It is ascended by a stair-case cut in the rock more than a mile high, at the top of which is the gate." It is without walls, depending, as well it may, on its situation for its defence. "The Turks hyperbolically say, its inhabitants never see a bird flying over their town."\*

The small fertile country of Mosul, south of Merdin, lies on both sides of the Tigris, embracing the ancient Nineveh, no trace of which is now in existence. The village of Nunia now occupies its place on the east bank of the Tigris. The city of Mosul contains 60 or 70,000 inhabitants, 8,000 of whom are Christians. South of this, at no great distance, is the site of the garden of

Eden

The western part of Mesopotamia, lies on the east bank of the Euphrates, and at present bears the name of Orfa, whose capital of this name has 30 or 40,000 inhabitants. North-east of Orfa, at a short distance, "there is an immense number of artificial caves in regular arrangement, presenting the remains of a subterranean city." Haran, known in the time of Abraham, was in this

Proceeding farther south, you enter the famous country of Babylonia, the southern district of Mesopotamia, the theatre of ancient wonders. Here were the plains of Shinar, on which the tower of Babel was built, which was afterwards converted into the temple of Belus, the most magnificent in the world. Here Babylon was situated, the largest city ever built. It had 100 gates of brass. Its walls were 60 miles in circumference, 87 feet thick, and 35 feet high. Alexander the Great, conqueror of the world, died here. For the wickedness of its inhabitants it was

long ago destroyed.

At Bagdat, the second Babylon, situate where the Tigris and Euphrates approach within six hours walk of each other, the Desert passes into an immense meadow, whose soil is alluvial, forming the garden of Asia. Springs of naptha and bitumen in great number, are found here; the latter of which furnished cement or mortar for the builders of Babel and of Babylon. The black bitumen serves instead of oil. It flows into the Tigris in great quantities, and the boatmen sometimes set it on fire, which exhibits the appearance.

of a burning river. Bagdat has 30,000 inhabitants, 50,000 of whom are Arabs. Helleh, a flourishing manufacturing town, situated in a forest of palms, is supposed to have been built of bricks taken from the ruins of Babylon. The celebrated tower of Nimrod or Babel, on the plains of Shinar, is now an immense square mass of ruinous walls, six miles from Helleh.

Such was the country first inhabited by man, his birth-place, whence successively all nations emigrated, and to a description of which, for obvious reasons, we have devoted a larger number of our pages, than to any other equal portion of our globe. It is worthy to be noticed here, that this most remarkable country lies along side that which is next in point of interest, called the Land of Israel, which at some future, and not distant period, is to be re-occupied by that remarkable people, who for nearly 1800 years have been scattered among all the large nations on the earth.

## Questions on Section VII.

Of what does this section treat?
What is said of the geographical features and character of Mesopotamia?

What were they before the fall of man?

Why may we presume that it contained every thing necessary to make it an abode of perfect enjoyment for man?

Can we determine what changes were pro-

duced by the curse and flood?

Were they very sad and awful?

What is there remarkable in the situation of this country?

Repeat the description given of it given by a

late geographer.

Is any part of it Desert?

Which part?

Of what desert is this the continuation?

What grows upon it?

What is said of its scanty supply of water?

What of the exhalations which rise from the putrid lakes?

What wind do these exhalations create when

put in motion?

How does the sun appear on the rising of the wind?

What is the cause of this awful appearance? What are the effects of this wind on men and

animals exposed to it?
What do they do to avoid these fatal effects?

Give the description of the northern parts of Mesopotamia, its mountains, valleys, fruits, mines, and forests.

What did Noah, Alexander, and Trajan build with the timber of these forests?

How many houses and inhabitants in Diarbekir?

Of what are the houses built?

What is said of the city of Merdin?

How many houses and inhabitants has it?

What plains does it overlook? How do they get into the city?

How high is it?

Having no walls, on what does the city depend for its defence?

Repeat the saying of the Turks. Describe the situation of Mosula

What ancient city does it embrace?

Are there any traces of Nineveh now to be found?

Name the city erected on its ruins. How many inhabitants in Mosul city? How many of these are Christians? What noted place is south of Mosul?

On what river does the western part of Mesopotamia lie?

What name does it bear?

What number of inhabitants in Orfa?

What great curiosity is found north-east of this city?

Describe these caves.

What place known in the time of Abraham is here?

What country lies south of Orfa?

Mention what there is remarkable that distinguishes Babylonia.

What is said of Babylon, its size, its gates, the extent of its walls, their thickness and height?

What distinguished conqueror died here?
Where is this great and proud city now?

Where is Bagdat situated?

Into what does the desert here pass?

What is said of this immense meadow, its soil and beauty?

What springs are found here?

To what uses were the naptha and bitumen formerly applied?

Into what river do they flow, and what effect is

produced when set on fire?

How many inhabitants in Bagdat?

How many Turks?

Of what materials is the present town of Helleh built?

Where is it situated?

What rivers are to be seen within six miles of it?

What remarkable country lies alongside of

Mesopotamia?

Is it expected that the scattered tribes of Israel will ere long be here collected?

How long since their dispersion?

### SECTION VIII.

#### THE FLOQD.

No event ever took place since the world began, so remarkable in the history of geography as THE FLOOD. This catastrophe, universal in its effects, destroyed the first world made for man in innocence, and was the beginning of that second world which has ever since remained, without material alteration, a fit dwelling-place for man, as a sinner, in a state of discipline. Till the flood, the earth remained essentially the same as it came originally from the hands of its Maker. Hence the great length of human life, and the immense population of the earth previous to this event. Immediately after the flood, the age of man was shortened one half, and subsequently, in David's time, to 70 years. A change from 969 years, to 70 in the age of man, must have had an adequate cause. Dr. Burnet and others, suppose it to have been occasioned chiefly by "a change in the temperament of the world; that the equality of the seasons, and evenness of weather, in the first earth," conduced to the health and long life of the antediluvians; and "that in the vast contrariety of the seasons and weather" in the second earth, we may find the grand operative cause of the comparative shortness of human life in the new world, ever since its commencement.\*

The curse was denounced on the earth by its Creator, immediately after the fall of man. Its full execution seems to have been delayed till the flood. Till this event, according to the best and most philosophical notions we can form of the state of the old world, its inhabitants enjoyed a constant serenity and equality of the heavens, on an earth so situated in regard to the sun, as to have a perpetual equinox, and a uniform temperature of the seasons,\* well adapted to promote their health and prolong their lives.

The population of the first world, considering the long lives of its inhabitants, and its adaptedness, as to its soil and climate, to support vastly more people than could live in the new world, in which it has existed from its beginning has been generally believed to have been far greater than at any period since. Several authors, who have made their calculations, have estimated the inhabitants of the first earth, extravagantly indeed, at two millions of millions of souls; more than two thousand times as many as have existed at any period on the new earth!!

The flood was doubtless a miraculous event; it is vain therefore to attempt to account for it on any known and settled philosophical principles. Those who have made the attempt have all differed in their theories. The simple account of it which Moses has given, is easily understood, and

the only one to be relied on.

The inhabitants of the earth during the period of 1656 years, favored as they were with every conceivable inducement to love and obey their

† Shuckford, Vol. I. p. 50.

<sup>\*</sup> Shuckford's Connexion, Vol. I. p. 51.

Maker, yet, under all their advantages, grew so grossly and universally wicked, that He determined to destroy the whole race, one family excepted, by a universal and tremendous flood. Among the many millions who then lived, Noah only, a just and upright man, found favor with God. To him He revealed his intention thus to destroy the whole race of men then on the earth, with the exception mentioned. This most alarming communication, made to Noah 120 years before the flood came, in order to give him time to warn his fellow-beings of their danger, and to prepare the ark, which he was directed to build for the preservation of himself, his family, and the various inferior creatures necessary to begin a new world. Noah, accordingly, under the divine di-rection, constructed an ark "about 600 feet long," 100 feet wide, 60 feet deep, and three stories high," into which he gathered such a number of the inferior creatures in their several kinds, as God appointed him, with the necessary provisions for them and his family. All things being thus prepared, Noah, in the six hundredth year of his life, about the beginning of our Nov. A. M. 1656,\* entered into the ark with his wife, his three sons, and their wives, eight persons in all. "The same day were all the fountains of the great deep broken up, and the windows of heaven were opened. And the rain was upon the earth 40 days and 40 nights. And the waters prevailed exceedingly; and all the high hills that were under the whole heaven, and the mountains also were covered. And every living substance that was on the face of the whole earth was destroyed;

<sup>\*</sup> Shuckford, Vol. I. p. 41.

Noah only remained alive, and they that were with him in the ark. And the waters prevailed upon the earth 150 days."\* This is all the history which Moses has given us of the antediluvian world.

## Questions on Section VIII.

What event is the most remarkable in the history of geography?

What world did the flood destroy?
What world succeeded the first?

For whom was the first world made?

For whom the second?

Did the inhabitants of the first world live longer than those of the second?

What was the cause of this?

How much did the age of man decrease immediately after the flood?

How much more from thence to the time of

David?

What cause does Dr. Burnet assign for this shoutening of human life?

Was the curse denounced by God, after the

fall, immediately executed?

By what event was it fully executed?

Till this event, what did the inhabitants of the earth enjoy?

Was the population of the first world much

greater than that of the second?

What causes are assigned for this difference?
What was the supposed number of inhabitants

-of the first world?

<sup>\*</sup> Gen. vii..

Is this probably an extravagant calculation?
What proportion does this bear to the present population of the earth?

Was the flood a miraculous event?

Can it be accounted for on any known philosophical principles?

What has happened to all those who have at-

tempted thus to account for it?

Is the simple account of the flood which Moses has given us, the most to be relied on?

Were the antediluvians peculiarly favored of

God?

Yet what was their character?

In consequence of their gross wickedness, what did God determine to do with them?

To whom did God communicate this deter-

mination?

Was Noah alone among the millions then on the earth, found just and upright?

How long before the flood came, was warning

given by God to Noah?

For what purposes did He give so long warning?
How long was the ark?—How wide?—How deep?—How many stories high?

When it was finished, what did Noah gather

into it?

When all was ready, who did Noah take into the ark with him, and how many in all?

How old was Noah when he entered into the

ark?

What year of the world did this take place?

In what month?

What took place in the earth the same day that Noah entered the ark?

How long did it rain on the earth?

Were the high hills and mountains all covered?

Did all living beings perish except those in the ark?

How long did the waters prevail on the earth?

Is this all the history which Moses has given us of the antediluvian world?

### SECTION IX.

THE FLOOD—ITS EFFECTS—LAND OF SHINAR—BABLL
——CONFOUNDING OF LANGUAGE——DISPERSION OF
MANKIND—THEIR EARLY SETTLEMENTS.

The ark, containing the only remaining means of re-peopling the new world, after being tossed by conflicting currents for 150 days, rested on Mount Ararat, supposed to be one of the highest peaks of the Gordiæan mountains on the southern borders of Armenia. How long the inhabitants of the ark remained on these mountains before they descended to the rich and beautiful plains on which they originally dwelt, which for a long time, probably, remained unfit for cultivation, we are not informed.\* About 100 years after the flood, however, we find the offspring of Noah's family, a great multitude, engaged in building the famous tower of Babel. And here I leave them to give a short account of the effects of the flood on the earth.

A description of the earth as it came from the hands of its Creator, and as it remained till the flood, has been given. What has been its state

<sup>\*</sup>Noah entered the arkin the six hundredth year of his age, second month, and seventeenth day of the month; and in the six hundred and first year of his age, and the first month, and first day of the month, "the waters were dried from off the earth." So that Noah remained in the ark about 285 days.

and condition since, can be more precisely determined. All we know of the former, is from the very brief history left us by Moses. Of the latter, we are eye-witnesses, and can search and judge for ourselves. Men of science have examined the surface, and the bowels of the earth to a very considerable extent; their united conclusion, expressed by one of the latest of these writers, is this. "The structure of the globe, of which we have been endeavouring to trace the grand features presents in all its parts the the grand features, presents, in all its parts, the appearance of a VAST RUIN."\* The facts on which this result is founded are, "the confusion and overthrow of the earth's strata, the irregular succession of those which seem to remain in their original situations, the wonderful variety which the direction of the veins and the forms which the direction of the veins and the forms of the caverns display, the immense heaps of confused and broken substances," and of sea shells in the interior of countries, and on the tops of the highest mountains, "the transportation of enormous blocks to a great distance from the mountains of which they appear to have formed a part, every thing, in short" on the face, and in the bowels of the earth, bears witness to the truth of the Mosaic account of the flood, and of its universal and awful effects upon the and of its universal and awful effects upon the earth. It has made it in truth a NEW WORLD. This new world ever since, has remained without any great and remarkable change, and will probably so remain, with increased improvement in its cultivation, till its final destruction.

The land of Shinar is that beautiful valley,

through which the rapid Tigris rushes from the

mountains of Armenia to the sea. 334 It includes the same district of country which has since been called Babylonia. In the northern part of this valley, at the foot of Mount Ararat, Noah and his sons probably formed their first settlement after the flood, and here the venerable patriarch is supposed to have spent the remainder of his days, and to have restored and established the worship of Jehovah, and for 350 years, till his death, to have fulfilled the duties of his patriarchal office over the virtuous part of his descendants. We have no account that he had any concern in building the city and tower of Babel. The unbeliving part only, of Noah's family, were engaged in this presumptuous and daring undertaking, and the confounding of their language was the consequence. While the language of Noah and those settled with him, which is supposed to have been the Hebrew, remained unchanged.

Of this miraculous event some account has already been given.† We here give that furnished by Moses. "These were the sons of Noah after their families, after their tongues, in their lands, after their nations; and by these were the nations divided in the earth after the flood." The people of Shinar, upon the confounding of their language, found it necessary to separate, and for this purpose they divided themselves into little bands or tribes under their leading men, each band having its own language, and its chief. Their dispersion was doubtless a progressive work, as the inhabitants of the earth, at this early period after the flood, could not have been very numerous.

<sup>\*</sup> Paxton.

Writers on this subject have fixed on the several countries, which were settled by the three sons of Noah, Shem, Ham, and Japhet. Japhet. though usually last mentioned, was the eldest of his brothers, and is supposed not to have been present at the confusion of Babel, and to have lived and died where his father dwelt during his life, after the flood. His descendants, Gomer, Tubal, Togarmah, Magog, and Mesech, each the head of a subsequent nation, settled in and near the northern parts of Syria, about Aleppo, which anciently was called Magog. These were "the kings of the north," mentioned in scripture, who were to "afflict the Israelites." Other chiefs descended from Japhet, as Askanez, who settled in Armenia, near Ararat; Tarshish in Cilicia; Kittim in Macedonia; Madac in Media; Tiras in Thrace; Riphath near Paphlagonia; Dodanion, uncertain.

The sons of Shem were Elam, the father of the Persians, Ashur, of the Assyrians, who built the cities of Nineveh, Rehoboth, Calah, and Resen; Arphaxed who dwelt at Ur of the Chaldees, near to Shinar and Assyria, whose descendants peopled India and Ophir, whence Solomon obtair ed gold; Lud the father of the Lydians in the Lesser Asia, and Aram, from whom descended the Syrians.

The sons of Ham were four; Cush, who settled on the river Gihon at the head of the Persian Gulf; Misraim, king of Egypt, from whom descended the Egyptians, Lybians, and Philistines. Phut, who is supposed to have settled in the land of Havilah, and to have been the father of the Arabians; and Canaan, father of the Canaanites. This the substance of what is offered by the best

writers concerning the first settlements made by the descendants of Noah after the flood.

Abram, at the age of 75 years, by divine direction left Haran, "the country of his kindred and of his father's house," and removed to Canaan, having this remarkable promise made to him by the Lord himself, "I will make of thee a great nation, and I will bless thee and make thy name great, and thou shalt be a blessing. And I will bless them that bless thee, and curse him that curseth thee, and in thee shall all the families of the earth be blessed."\*

From the call of Abram to the opening of the Christian era, 4000 years after the creation, the history of the world is principally comprised in the history of the Hebrew nation, and is contained in the Old Testament scriptures. Much of the history of the other nations of the earth, co-existing with the Hebrew, is blended with their history.†

I close the first Grand Division of this little work, Ancient Geography, with a brief account of the four Ancient Empires, which successively existed from the flood to the beginning of the Christian era, each embracing, during their existence,

the greater part of the inhabited world.

1. The Babylonian, or Assyrian Empire, in Asia. Nimrod was the founder of this empire, 101 years after the flood. He governed it 148 years, during his life, and was succeeded by Belus, a man of study and science, the inventor of the Chaldean Astronomy, who reigned 60 years, and died, A. M. 1965. In the mean time the Assyrian Empire had commenced under Ashur, a descendant of

Shem, and was continued under his successor Ninus, who, by conquest, added the Babylonian to his own empire. This empire continued 1300 years, till the death of Sardanapalus, and was then terminated by Cyrus, who established

2. The Empire of the Medes and Persians, 432 years before the birth of Christ. This empire, at the end of 108 years from its beginning, was overturned by Alexander the Great, king of Ma-

cedonia, who founded

3. The Empire of the Greeks and Macedonians, B. C.\* 330. After the death of Alexander, the countries which he conquered were shared among his generals. Their respective kingdoms, at their deaths, successively fell under

4. The Roman Empire, which at this time comprehended almost the whole of the then ke own world, and at the opening of the Christian era, was in the meridian of its strength and glory

# Questions on Section IX.

How long was the ark on the water before it rested on Mount Ararat?

Of what chain of mountains is Ararat the high-

est peak?

How many days did Noah continue in the ark? How long after the flood did Noah's offspring begin to build the tower of Babel?

\* B. C. Before Christ.

<sup>†</sup> Those who wish to enter more deeply into the history of this period of the world, may consult Shuckford's and Prideaux's Connexions, Paxton's Illustrations, and Rollin's Ancient History.

Have men of science examined the surface and bowels of the earth since the flood?

What is their conclusion?

What are the facts on which this result is founded?

Do these facts bear witness to the truth of the Mosaic account of the flood?

What has the flood made of the earth?

Has this New World remained without any remarkable change since the flood?

Will it probably so remain till it shall be de-

stroyed?

Describe the land of Shinar.

Is Babylonia included in this country?

In what part of this valley did Noah and his sons probably settle?

How long did Noah live after the flood, and

where did he live?

What office did he sustain?

Had he any concern in the building of Babel?

What part of Noah's family engaged in this undertaking?

What was the consequence to them?

Was this a miraculous event?
What language did Noah speak?

What account of it has Moses given?

What did these builders do after this confounding of their language?

Was their dispersion a progressive work?

Is it known in what countries the three sons of Noah settled?

Name these sons.

Which was the eldest?

The next?

The youngest?

Was Japhet present at the confitsion of Bahel?

Where did he live and die?

Name his descendants.

Were these so many kings?

Where did they settle?

What was Aleppo anciently called?

How do the scriptures speak of these kings?

What were they to do?

Had Japhet other children?
Name them and where they settled.

Name the sons of Shein, and the parts of the world peopled by them.

Who was the father of the Persians?

Of the Assyrians?

Where did Arphaxed dwell?

What parts of the world were peopled by his descendants?

Who was the father of the Lydians?

Who of the Syrians?

How many sons had Ham?

Name them and the places where they settled, and point to the places on the map.

How old was Abram when he was called, and

left Haran?

To what place did he remove by divine direction?

What remarkable promise did God make him? In the history of what people, is that of the world principally comprised, from the call of Abram till the coming of Christ?

Where is this history to be found?

Is much of the history of other nations than of the Hebrews, found in these scriptures?

How many empires were there in the world, from the flood to the coming of Christ?

Name them.

Who was the founder of the Babylonian Empire, and when and where was it established?

What other empire was shortly after founded by

Ashur?

Under what conqueror were these two empires united?

How long did this combined empire last?

Who overthrew it?

What empire did Cyrus establish, and how long before the birth of Christ?

What was the period of this empire?

Who overturned it?

What empire did Alexander establish for himself, and when?

What happened to this empire after the death

of Alexander?

When his generals who became kings died, what became of their respective kingdoms?

What did the Roman Empire at this time com-

prehend?

What was the state of this empire at the opening of the Christian era?

# MODERN GEOGRAPHY.

#### SECTION 1.

The fall of the Roman Empire—The dispersions state, and prospects of the Jews.—The character, introduction, and effects of Christianity.—The rise, character, and final overthrow of Popery and Mahometanism.

When Jesus Christ came upon earth, the Roman Empire, as was observed in the last section, was at the height of its power, extent, and scientific improvements. The world was at peace. The temple of Janus was shut.\* In this important particular there was a remarkable preparation for the establishment and spread of the new religion, which was now to be introduced. Soon, however, the extent and power of this vast empire began to diminish, and was finally over-

<sup>\*</sup> Janus was the first king of Italy. After his death he was ranked among the gods, because he had exerted his power and influence in civilizing his rude subjects. The temple built to his honor after his death, was always open in time of war; in peace it was shut. During a period of 700 years, it was shut but three times.

turned by the Saracens,\* the disciples of Mahomet, from the east, and afterwards by the Turks, and by the Goths, Vandals, and other barbarous nations from the north. These events happened in the fourth and fifth centuries. The descendants of these conquerors have ever since possessed the different kingdoms into which the Roman Empire was divided. The nations now became so numerous and powerful, that no universal empire has ever since existed. There never were but the four we have mentioned. There will be no other till the Prince of Peace shall establish his empire over all nations, "from the rising to the setting sun," an event confidently expected by all true Christians.

When Christ the Messiah came, the Jews, with few exceptions, rejected him; the sceptre departed from Judah; their city and temple were awfully destroyed, and from this time they have been scattered, despised, persecuted, and enslaved, among most of the principal nations of the world, remaining to this day a distinct and peculiar people, cherishing a well grounded hope of being one day gathered again to the land of their fathers, and raised to the distinguished rank they formerly sustained among the nations of the world.

When our Savior first published his religion, the whole world was overspread with error and corruption in the Jewish nation, who had long been the depositary of the true religion, and with gross idolatry and superstition, among all the other nations on the earth. The light of truth was scarcely any where visible. Thick darkness had everspread

<sup>\*</sup> Saracens was a general name given to all the tribes who inhabited the country between Mecca and the Eurphrates.

all the people. The gospel, is the light of the world. It was preached "to every creature," in obedience to the command of God within the first century after its publication. In this way the light from heaven was made every where to shine with healing in its beams; elevating mankind from their deep degradation and misery, cheering them with the hope of happiness in this life, and of everlasting rest in heaven, and plainly pointing out to them the path to the possession of these invaluable blessings. It formed a new world, so

great were the changes it effected.

This happy state of the world was not of long duration. Soon errors and corruptions were introduced into the Christian religion, which of course, gradually diminished its good influence on mankind. These errors and corruptions, under the general name of Antichrist, (meaning an enemy of Christ,) at length became identified with the Church of Rome. The head of this Church is the Pope. His power or reign, predicted by the prophet Daniel to last 1260 years, is supposed to have commenced about the year 606, when Pope Boniface III. by flattering Phocas the. Emperor of Constantinople, one of the worst of tyrants, procured for himself the title of Universal Bishop. From this time Popery has shed a most baleful, persecuting, and cruel influence over the Christian world. It received a powerful check by the Reformation, in the 15th century and has since here continuelly lessoning and tury, and has since been continually lessening, and at the end of 1260 years from its rise, is expected entirely to cease, and to give place to His domin-

ion, "whose right it is to reign."

Mahometanism, another great error of extensive influence, co-operative with Popery for the sub-

version of the pure religion of the gospel, was framed and propagated by Mahomet, who was born in Arabia and flourished from the year 600 to 622 after Christ.

The book which contains their religion is called the Alcoran, and is the same to a Mahometan, as

the Bible is to a Christian.

They believe that Jesus Christ was the true Messiah, but that Mahomet was a greater prophet than him, and improved his religion. They divide

their religion into two general branches:

1. Faith, which summarily is, that there is but one God, and Mahomet is his prophet. Under this general head they comprise the six following particulars—Belief in God—in his Angels—in his scriptures—in his prophets—in the resurrection and judgment, and in God's absolute decrees.

2. Practice, in regard to what they reckon four points—Prayer, with washings—alms-fastings—and pilgrimage to Mecca.

The Mahometans, as well as Christians, are dîvided into a great variety of sects, under different names.

Mahomet propagated his religion, not by force of evidence only, but chiefly by force of arms, and various subtle artifices, very different from the manner in which Christ propagated his religion. By these means it spread with astonishing rapidity over Arabia, Syria, Egypt, and Persia, and Mahomet became the most powerful monarch of his time. His successors spread his religion and conquests over the greatest part of Asia, Africa, and Europe; and they still give law to a considerable part of mankind; but their power, like that of the Pope, is destined at some future period to

come to an end. It seems already tottering to fall, to rise no more.

## Questions an Section I.

When Christ came upon earth, what was the state of the Roman Empire—of the world—of the temple of Janus?

Who was Janus?

What was his character?

What was the custom concerning his temple?

How often was it shut in 700 years?

Was the world at the coming of Christ prepared to propagate his religion?

Why?

What happened to the Roman Empire soon after the coming of Christ?

Who assailed it from the east?

Who from the north?

Who were the Saracens?

In what centuries did these changes in the Roman Empire take place?

Who possessed the different kingdoms into

which the Roman Empire was divided?

Has there been any Universal Empire in the world since that of the Romans?

Assign the reason given.

What Universal Empire is expected to exist hereafter?

How did the Jews treat their Messiah?

What were the consequences of this rejection to the Jewish nation?

What is their hope as to their future state?

What was the state of the world when Christ first published his religion?

What is said of the gospel?

How extensively was it preached in the first century?

What were its effects on mankind in respect to

this and a future world?

What did these great changes produce?

Was this happy state of the world of long duration?

What were introduced which diminished the

good influence of religion on mankind?

What were these errors and corruptions called?

What is Antichrist?

With what church is he identified?

Who is the head of this church?

How long is his reign to last?

Where do we learn this?

When did his reign begin?

What important events took place at this time? What has been the character and influence of Popery?

What great event happened in the century

which checked this influence?

Has it since been continually lessening?

When is it entirely to cease?

Whose dominion will then take place of that of

the Pope?

What other erroneous religion originated with that of Popery, and has conspired with it for the subversion of the gospel?

Who was the framer of this religion?

Where was he born, and when did he flourish?

What is their bible called?

What do they believe concerning Christ?

What concerning Mahomet?

Into how many branches do they divide their religion?

What is the first?

Under this division what do they comprise? The second?

How many and what are their points of practice?

Are there many sects among Mahometans? How did Mahomet propagate his religion? How extensively did he propagate it? What is said of his power? What did his successors do?

What is said of the present state and prospects of the Mahometan power?

### SECTION II.

#### THE WORLD IN GENERAL.

Of Man.—The varieties in the human race.—Uninhabited parts of the world.—Its population, and that of its principal divisions.—Proportion of deaths according to age.—Average length of human life.—Number of births and deaths annually in Russia.—Proportion of births and deaths in a generation.—Amount of births and deaths on the whole globe in a year, day, hour, minute.—Increase of mankind, if there were no wars nor pestilences, and of their support by existing and future improvements.—The proportions of the sexes that are born.

THE magnitude, component parts, and grand divisions of the earth, have already been given in the *third* section under the head of Ancient Geography, which should be reviewed by the pupil before entering on this.\*

Of Man.—The world was made for man. The whole human race are descendants from Adam "and Eve." God hath made of one blood, all nations of men, for to dwell on the face of all the

<sup>\*</sup>A considerable part of the information contained in this and some following sections has been derived from the late geography of M. Brun, who is probably the best authority extant on some of the subjects which will here be brought up to view.

earth."\* The celebrated Blumenbach reduces all

mankind to five principal varieties.

1. The first variety occupies Western Asia, Eastern and Northern Africa, Hindostan, and Europe. This variety is distinguished among other marks, by the color of the skin, more or less white or brown.

2. The second variety is the Tartar, or Eastern Race, of yellow color, with other distinctions. All the Asiatics east of the Ganges, (except the Malays,) the Laplanders in Europe, and the Esquimaux Indians in America, constitute this variety.

3. The American is the third variety, of copper color, comprehending all the aborigines of the western continent and islands, except the Es-

quimaux.

4. The inhabitants of the "Oceanic countries," or the Malay race, of a tawny color, are the fourth variety, comprehending the islanders of the Pacific Ocean, New-Holland, and of the Indian Ocean, including Madagascar.

5. The fifth is the Negro variety, color black, inhabiting southern and western Africa, Van Dieman's Land, New Caledonia, and New Guinea.

Such are the principal varieties of the human species, spread over the habitable parts of the

globe.

So far as discoveries have yet been made, the only portions of the earth destitute of human inhabitants are, the islands of Spitzbergen, and Nova Zembla in the north; the Sandwich Land, and island, the most southerly land discovered in

the Southern Ocean, and the islands of Falkland

and Kerguelen in that neighbourhood.

Population of the world.—It has been common to estimate the inhabitants of the earth at a thousand millions, of whom Asia contained one half. This estimate is supposed to be much too high. M. Brun gives the following as the result of his own investigations on the subject, and is probably as near the truth as any estimate which has yet been made. In great part, however, it must of necessity be conjectural.

Asia	-	-		-		-		340 1	nillions,
Europe	-		-		1		-	170	do.
Africa	-	-		-		-		70	do.
America	-		-		-		-	50	do.
Islands of	the	Oc	ear	ïs		-		20	do.

Total 650 millions.

Proportion of deaths according to age.—The common limit of human life is 70 years. Few live beyond 90. Of all infants born, one out of faur dies the first year. Two-fifths only attain their sixth year. And before the 22d year, one half of the generation is consigned to the grave. The average length of the human life is about 33 years. Three generations pass off the stage of life every hundred years. In the Russian empire, the number of births annually, is a million; that of deaths, from 5 to 600,000.

Proportion of births and deaths in a generation.— Supposing the whole number of the human race to be 700,000,000, and that the ratio of deaths to the living population to be as 1 to 33, and that of the births to the living, as 1 to  $29\frac{1}{2}$ , we shall have

for the whole globe,

	Births.	Deaths.
In one year,	23,728,813	21,212,121
day,	65,010	58,120
hour,	2,708	2,421
minute,	45	40
FF77 2 1 17		

The result is, that if there were no wars nor pestilences, there would be an annual increase of more than 2,500,000 individuals, which in a 100 years, (were this annual increase no greater, and it would doubtless be greater,) would increase the inhabitants on the globe from 700 to 1,000,000,000, and in an increased ratio for every century to come. With the improvements already made, and which probably will be made in future centuries, the earth may be made to maintain as great a population as this would produce.

Proportion of the two sexes. In Europe the proportion of boys born, is to that of girls, as 21 to 20. On the other hand, in consequence of the greater exposure of the males beyond that of the females, the number of deaths of the former to that of the latter, is as 27 to 26; still there is a small surplus in favor of the males. In other parts of the world, owing to various causes, the propor-

tion of the sexes is different.

# Questions on Section II.

For whom was the world made? Are all mankind made of one blood?

Repeat what the apostle testifies on this subject.

Into how many varieties is the human race divided?

What parts of the world do the first variety occupy?

What is the color of their skins?

What race constitute the second variety?

Where do they live? What is their color?

Which is the third variety?

What is their color?

Who are comprehended in this variety? Who are included in the fourth variety?

What is their color?

What part of the world do they occupy?

What is the fifth variety called?

What is their color?

Where is their place of abode?

What parts of the earth remain without human inhabitants?

What has been the common estimate of the number of inhabitants on the globe?

What is M. Brun's estimate.

How many in Asia?—in Europe?—in Africa? -in America?—in the Islands of the Oceans?

What is the common limit of human life?

How many live beyond 90?

How many of the infants that are born, die in their first year?

What proportion attain their 6th year?

What part of a generation die under the age of 22 years?

What is the average length of human life?

How many generations die every 100 years? What is the annual number of births in Russia?—of deaths?

What is the ratio of deaths to the whole population of the world?

What that of the births to the living?

On this calculation, what is the number of births in a year?—a day?—an hour?—a minute?

What number of deaths in a year ?—a day ?—an hour ?—a minute ?

If there were no wars nor pestilences, what would be the annual increase of inhabitants in the world?

At this rate what would be the number of inhabitants at the end of a century from this time?

By improvements already made, and which probably will be made in future, will the earth probably be prepared to support as great a population as this would produce?

### SECTION IL

#### POLITICAL GEOGRAPHY.

Languages .- Forms of Government .- Religion.

This branch of Geography "considers the earth according to its political divisions, and in its relations to the different societies which are established

lished upon it."

Languages of mankind. We have already observed that till the building of Babel, 100 years after the flood, "the whole earth was of one language, and of one speech;" and that about 70 new languages were miraculously formed when the Lord confounded the language of the builders of Babel and scattered over the face of all the earth." The number of radically different or primitive languages now spoken by the inhabitants of the earth, and the nations who speak them, have not been ascertained; much less can we enumerate and define the endless variety of dialects. which from various causes have grown out of these primitive languages. The subject is one of extreme complexity and difficulty, and the advances toward a simple, clear, and distinct classification of the different languages and dialects

<sup>\*</sup> Gen. xi. 1, 7, 8, and 9.

spoken by the different nations of the earth, have hitherto been slow and small.\*

By means of the increasing commercial and missionary intercourse among the nations, a more correct knowledge of their different languages will be acquired, and perhaps in the happy period of the world which is to come, there may be an amalgamation of all languages; there shall be again, as in the years before the flood, "but one language and one speech in the whole earth."

Forms of Government. For their common security and welfare, the inhabitants of the earth have formed themselves into communities, and instituted governments, varying in their forms. The government of no two nations, perhaps, is exactly similar. There are but three kinds of simple forms of government, Monarchy, Aristocracy, and Democracy.† All other governments must, of course, be a mixture of these.

The earliest form of government was a species of Monarchy, called Patriarchal government, in which the chief magistrate, so far as related to government, sustained the authority of a father over his people. This form of government is said to have existed in China for a long succession of years.

<sup>\*</sup> Noah Webster, LL. D. of this city, has spent more than 20 years of the vigor of his life, in investigating this subject. The results of his laborious researches, it is understood, are shortly going to the press in a large work, a prospectus of which is shortly to be published; and from the long established literary character of the author, it is expected that much new light will be thrown on this complicated subject. The work is looked for by the public with strong desire.

† Precident Adams on the American Constitutions.

When the sovereign power is exercised by one man, that government is called a Monarchy. The chief magistrate in a monarchial government is styled variously,—King, as in Spain, &c.; Monarch, as in Prussia; Sovereign, as sometimes in England; Emperor, as in Germany, Austria, China, and Russia. Monarchies are of different kinds,—despotic, absolute or arbitrary, limited or mixed, according to the degree of power vested in the sovereign. The Turkish government is an example of the former; that of Great Britain of the latter.

An Aristocracy is a government of nobles. Of this kind was the government of Venice, till the

revolution it experienced in 1797.

Governments formed by a free people, or by their proper representatives, and administered by officers of their own choice, and where the executive power is not vested in an individual, are called Republics. Of this kind is our own government, and it is perhaps the best in the world. Republics are of three kinds;

1. Democratic Republics, where elections are free and frequent, and the people enjoy the greatest share of freedom. Of this kind is that of several of the Swiss Cantons, and of the United States

of America.

2. Aristocratic Republics, in which the people enjoy less liberty; such were a number of the

Swiss Cantons, Lucca, Genoa, Venice, &c.
3. Monarchic Republics, of which kind may be reckoned England and Poland, as the government of the latter existed in 1786.

The fundamental laws of a state or country, which secure the rights of its inhabitants, and regulate the conduct of its rulers, are called its Con-STITUTION.

Religion. By religion is here meant a system of divine faith and worship, as differing from other systems; that is, if I embrace one system of divine faith and worship, and my neighbor a different one, we are of different religions. We use the word in this sense when we ask another, What is his religion?\*

Mankind, in respect to religion, as now defined. may be divided into 1. Christians, 2. Jews, 3. Mahometans, 4. Deists, 5. Pagans, or Heathers, and 6.

Indians.

Christians. All who profess to be the disciples and followers of Jesus Christ, are called after him, Christians. The greater part of the inhabitants of Europe, and of the American United States, together with those in the Spanish and Portuguese parts of South America, the West India Islands, and some few parts of Asia and Africa, are of this denomination.

Christians are divided into 1. Roman Catholics, who have a Pope at their head, and are thence called Papists. These are a numerous sect of Christians, inhabiting the southern and interior parts of Europe. The Spanish, French, and Porfuguese settlements, in different parts of the world, are mostly of this denomination.

2. Protestants, a name given in 1529 to all who renounced the Roman Catholic Religion, and embraced the principles of the Reformation.

\* By the word religion, we often, perhaps more generally, mean virtue, piety, godliness, founded on reverence of God, and expectation of future rewards and punishments.

† In 1529, the Diet of the German empire issued a decree against the principles of the Reformation, which had, since Luther broached them in 1517, been spreading in Germany. Against this decree, several of the electors, joined by a Protestants are divided into Lutherans and Caluinists, as they embrace the doctrines peculiar to LUTHER OF CALVIN, two of the first and most con-

spicuous Reformers.

Lutherans and Calvinists are subdivided into Episcopalians, Presbyterians, Congregationalists, Independents, Baptists, and Methodists; and these are again divided into Moravians, or United Brethren, Arminians, Calvinists, Unitarians, Universalists, Mennonists, Tunkers, &c.

Under the head of Protestants may be ranked

Under the head of Protestants may be ranked also the Friends, commonly called Quakers, a respectable, peaceful, and industrious body of people, dwelling principally in England and the

United States of America.

The Greek Church is tolerated in Turkey, countenanced in Hungary, Sclavonia, and Dalmatia, and established by law in Russia. Among its branches are the Nestorians in Turkey, Tartary, Mongolia, and China, and the Monophysites, comprising the Copts in Egypt, and the Armenians and Jacobites in Abyssinia. The Greek Church resembles in many particulars, the Roman Catholic. Its professors, like the Catholics, keep Lent and many other days of fasting; they have numerous ceremonies in their worship—have holy water, &c. The great sanctification of the waters is performed at Petersburgh, twice in the year, in commemoration of the baptism of our Savior, in the most splendid and magnificent manner. They differ from the Catholics in that they have never acknowledged the Pope.

number of the cities, read publicly their PROTEST. Since this time, all who have embraced the reformed religion have been called PROTESTANTS.

The Jews. The Jews are the seed of Abraham, or the descendants of the chosen people of God, who formerly inhabited Judea, but are now dispersed, and have become a proverb, in fulfilment of scripture prophecies, in almost every nation under heaven. They adhere to the Old Testament scriptures, but reject the New.

Mahometans. The Mahometans derive their

name and doctrine from Mahomet. (See page

93.)

Deists. Those who assert the sufficiency, universality, and absolute perfection of natural religion, with a view to discredit and discard all extraordinary revelation, as useless and needless, are called Deists.

Deists are no where to be found, but in Christian countries; the reason is, that without the light of revelation, which gives consistency and beauty to natural religion, its sufficiency and absolute perfection has never yet been admitted by sensible men in any age. Deists have been compared to the wiseacre, who thought the sun useless, because he shined only when we had the light of the day.

Lord Herbert in the 17th century, was the first who reduced Deism to a system. Deists are not agreed among themselves. Some acknowledge a future state; others deny it. Others again, who form the most numerous class, think it a very doubtful question, Whether the soul exists after

death.

Of the Pagans or Heathers. Those people who represent the Deity under various forms or images, or who pay divine worship to the sun, fire, beast, or any of the creatures of God, are called PAGANS OF HEATHENS.

The Pagans are more numerous than all other sects collected. They inhabit all other parts of the globe, which are not inhabited by Christians,

Jews, Deists, and Mahometans.

They are divided into innumerable sects, most of which have different idols or objects to which they pay divine worship. The worship of the Grand Lama, is the most extensive and splendid mode of Paganism.

This species of Paganism is professed by a large proportion of the people of Asia.

The Grand Lama is a name given to the High Priest of the Thibetian Tartars, who resides at Patoli, a vast palace on a mountain, near the banks of the river Barampooter. At the foot of this mountain reside 20,000 *Lamas*, or priests. His worshippers are very numerous, and come from far distant countries. Even the emperor of China himself acknowledges him in his religious character.

The Grand Lama, who is some healthy peasant purchased when young, and privately educated for the purpose, is never to be seen but in a secret place in his palace, amidst a great number of lamps, sitting cross-legged upon a cushion, and decked all over with gold and precious stones; where, at a distance, the people prostrate themselves before him, it being unlawful for any so much as to kiss his feet. He returns not the least sign of respect, nor ever speaks, even to the greatest princes; but only lays his hand upon their heads, and they are fully persuaded they receive from thence a full forgiveness of all their sins. The subordinate Lamas, who wait on him. enjoy all the good things that are presented to him, who is himself, the most miserable wretch in the empire. When he begins to grow old or sick, they privately despatch him, and set up another in his place.

Besides the religious sects already mentioned, there is an anomalous set of human beings, called Athrists, whose distinguishing characteristic is a

destitution of all religion.

Among this diversity of religions, each individual must choose for himself, when sufficiently informed to make a true judgment. We shall be safe in making the Bible our rule; remembering always, that it is necessary to a good man, that he love God with all his heart, and his neighbor as kimself. None but such as "fear God and work righteousness," are accepted of him.

The Indians of North America constitute another class of religionists, distinct from all others. They are not idolaters, like the Pagans of the east, but believe in one Great Spirit, who made all things, and to whom they offer worship after their own manner. They believe also in a future state, of which they have very crude and absurd

notions.

The following numbers, belonging to the different religions, taken in part from M. Brun, are probably nearer the truth than any which have appeared.

Catholics in Europe, 88,000,000, 116,000,000

Greek Church, - - - 70,000,000

Protestants, - - - 42,000,000

Jews, -		5,000,000
Mahome	tans,	110,000,000
	Braminism, 60	
	Schamanism, or the reli-	
	gion of Delai Lama, 50	
Pagans,	Buddism, including the re-	310,000,000
	ligion of Fo, 100	
	Fetichism and others, in-	
	cluding Atheists, 100	
Indians,		1,000,000
	Total	654,000,000

"Languages and religious creeds are the ties of moral society, which often survive the fall of civil and political society, whose province it is to determine the boundaries of states and empires, which it is the province of political geography to describe." \*

## Questions on Section III.

How does Political Geography consider the earth?

Till the building of Babel did all mankind speak but one language, or more?

How many were spoken after God confounded

the language of men?

Is it known how many radical or primitive languages there are in the world?—or how many dialects of these languages??

Who is about to publish a large work on this

subject?

Is it probable that all mankind may, at some period hereafter, be brought again to speak but one language?

For what purpose was government instituted? How many simple forms of government are

there?

Are all other governments a mixture of these? What was the earliest form of government in the world?

Where did this kind of government long exist? Describe a monarchical government, and give the various names of the chief magistrate, and the countries where these names are given.

How many kinds of monarchy are there?

Give an example of each.

What is an Aristocracy?—a Republic? How many kinds of republics are there?

Define them.

What are the fundamental laws of a country called?

What is meant by religion?

Give the illustration of this meaning.

What is the proper meaning of the word e-tigion? [See note.]

How are mankind divided in respect to re-

ligion?

Who are Christians?

What parts of the world do they inhabit?

How are Christians divided?

Describe the Catholics, and name the cesthey inhabit.

Describe the Protestants, and when and how

they came by their name.

How are Protestants divided?

What are the subdivisions of Lutherans and Calvinists?

Are the Friends or Quakers Protestants?

Where do they principally reside?

In what countries do Christians of the Greek Church reside?

In what points do they resemble the Catholics?

In what do they differ?

What branches of this church are mentioned?

-- their places of residence?

Who are the Jews, and where did they formerly live?

Where and what are they now?

From whom do the Mahometans derive their name and doctrine?

What do Deists believe, and what do they discard?

Where are they only to be found? Give the reason assigned for this. To what are they compared?

Who reduced Deism to a system, and when? On what points do they differ among them-

selves?

Who are Pagans or Heathens? What is said of their numbers?

What parts of the globe do they inhabit?

What is said of their divisions?

Which is their most extensive worship?

State what is said of the Grand Lama-the place of his residence—the number of Lamas or priests who reside at the foot of the mountainthe number and character of his visiters.

State the other particulars mentioned concern-

ing this extraordinary heathen Deity.

Who are Atheists?

What is their distinguishing characteristic?

Are the Indians idolaters?

In whom and what do they believe?

Give the numbers of the Čatholics in Europe—out of Europe—of the Greek Church—of Protestants—of Jews—of Mahometans—of Pagans of the different descriptions—of the Indians—the total number?

What are the ties of moral society?

What is the province of civil and political society?

### SECTION IV.

PROGRESS FROM THE SAVAGE TO THE CIVILIZED STATE.

Savages.—Civilized Men.—Navigation, effects on the state of the world.

Suvages. Men in the savage state have no written language, no history, but very imperfect tradition; no books, no knowledge of the arts of reading, writing, ari hmetic, agriculture, mechanics, or of navigation, or regular commerce. Their ideas of their own origin, and of that of the world, and of those beings who inhabit it generally, and of him who made them all, and of their future destiny, are very crude, and have in them very little of truth. They roam in forests, are sustained by simple food, which they there gather, and dwell in huts.

Civilized Men. These are in a state directly the reverse of that of the savages. They have written languages, historics, and books on all the arts and sciences, and knowledge of the means of multiplying and disseminating books to any extent, of maintaining intercourse with each other all over the world by writing; especially have they the Bible, which contains all the light and truth necessary to guide mankind through this world to

future and endless happiness. The difference therefore between savage and civilized men is immense, and when this difference is considered, it should make us feel our obligations to do what we can to extend the blessings of civilization, and of the Bible, to all who are now destitute of them.

Navigation. "In the history of mankind, the progress of navigation will always hold the first place after that of agriculture. The civilization produced by agriculture, is purely local. It stops as soon as the wants of the nation are supplied."\* Those who are engaged in it, feel little interest in what is going on in the great world. "But navigation disturbs this Chinese happiness, and interrupts a repose so opposed to the high destinies of human nature. A vessel unites the most distant regions of the world; cities, and even whole nations are, in effect, transported to other climates; the tumult and hum of civilization is heard among indolent savages, and a universal movement pervades all classes." "At first civilization was collected around the Mediterranean sea; it was for ages almost the only sea on which there was any navigation. At length the mariner's compass was invented, and Columbus appeared. A new world saw our vessels enter on its shores. A new Europe has arisen on the American continent, and is advancing with giant steps in the career of improvement. The Atlantic Ocean has already become, what the Mediterranean was before, the great highway of civilized nations."† The Indian, the Pacific, and the Eastern Oceans, extending from pole to pole, have already been crossed by

American navigators. "Already British colonists are planting the innumerable islands which form to the south-east of Asia, a fifth part of the world; and Australasia, the most delightful country on the globe, will probably, ere many generations pass away, have reached the highest pinnacle of civilization. Let colonists fraught with our learning found a new Greece in Otaheite, the Sandwich, or Pelew Islands; then those rising grounds which now produce only aromatic herbs, will be covered with towns and palaces; bays now shaded by a forest of palms, will display a forest of masts; gold and marble will be extracted from the bowels of mountains as yet untouched by the miner; and one day, perhaps, Europe, Asia, and Africa, will find successful rivals in countries now scarcely known. Thus in the history of the human race, the past, the present, and the future, are connected with the position of the great seas of the globe, and with the progress of navigation,"

# Questions on Section IV.

Describe men in the savage state.

What are their ideas of their own origin, and of that of the world?

How do they live?

Describe civilized en n al the particulars mentioned?

What should this great difference between savage and civilized man teach us?

What place in the history of mankind does

Navigation hold?

What is the civilization produced by Agriculture?

When does it stop?

How do people who are engaged in Agriculture generally feel in regard to what is going forward in the great world?

What effect does navigation produce on such

people?

What is said of the wonderful effects of a

Where was civilization at first collected?

Was the Mediterranean for ages almost the only sea navigated?

What machine was invented, and what distin-

guished man arose to use it?

What was the consequence?

What has since arisen on the American Continent?

What is this "New Europe" doing? What is said of the Atlantic Ocean? What have American payigators done?

Where have British colonies been established? What will these colonies in a few ages probably become?

What is the recommendation given as to Col-

onists?

What would be the consequences should a new Greece be thus founded in these islands?

State the conclusion drawn from the whole.

### SECTION V.

OF PROTESTANT CHRISTIAN MISSIONS TO THE HEATHEN.

Commencement, Progress, Success, Present State, and Future Prospects of these Missions.

Commencement. WE can look back, in reference to Protestant missions among the heathen, to the year 1646, when the Rev. John Elliot of Roxbury, near Boston, commenced his labors among the Indians in that vicinity. From that period to the year 1795, the efforts to convert the heathen were few, scattered, feeble, and of small effects. At the extraordinary meeting of all denominations of Protestant Christians in London, in the summer of this year, (1795,) a missionary spirit was most remarkably kindled, which has since been diffused throughout the whole Christian world. The fruits of this spirit have been very wonderful, both at home and abroad. Among these fruits may be reckoned the establishment of the British and Foreign Bible Society, and all similar societies since formed in Europe, America, and in almost all the other parts of the world, together with sabbath schools, domestic

missions, and tract societies, and all that Christian zeal, and sympathy for the heathen, and for all who are ignorant of the gospel, manifested in the diversified efforts that are made to support these great institutions. Christians, who look on these surprising operations, and who at the same time view and contemplate the corresponding improvements in agriculture, in literature, the arts and sciences, in navigation, in civil government, all co-operating together to the same great end, the peace, union, and happiness of mankind; in view of all these things, Christians believe that the happy period described in the closing chapter of this book, is in truth drawing near, and is now even at the door.

The number of missionaries which have been sent into heathen countries, from the beginning of missions, including all the members of mission families, cannot be correctly estimated. From some investigation of the subject, we may reckon more than 2000 persons now on the ground, occupying more than 1000 different stations, scattered amongst almost all the Pagan nations of the world; beside a large and fast increasing number of natives, who have been educated for this employment, and a great and increasing number of Domestic Missionaries, whose business it is to build up the waste places in Christian countries, and to preach the gospel, and plant churches in the extensive frontiers of our own country. A view of these things can hardly fail to fasten, on serious minds, a conviction that a great work, indeed, is going on in this most important branch of improving the moral and religious condition of man-kind. It is worthy of notice and commendation, that the United Brethren, known by the name of

Moravians, a small body of about 16,000 souls, began their benevolent operations, as far back as 1732, have since steadily, patiently, and successfully, pursued them in the most forbidding parts of the globe.

# Questions on Section V.

When did Protestant missions among the heathen commence?

Who was the first missionary named, and where

did he live, and with whom did he labor?

From 1646 to 1795, what is said of the efforts to convert the heathen?

What meeting was held in London in 1795?

What took place at this meeting?

What is said of the spirit kindled on this oc-

What have been its happy fruits?

Enumerate them.

What corresponding improvements have been made in agriculture, &c. ?

To what great end have all these improvements

co-operated together?

What do Christians, who look on these sur-

prising operations, believe?

What number of missionaries have been sent among the heathen from the beginning of missions?

What number of Protestant missionaries, including members of the mission families, are supposed to be now on the ground?

Who are to be added to this number in heathen

nations and in our own nation?

How many stations do these Missionaries occupy, and where are these stations situated?

What truth does a view of these things tend to

produce on serious minds?

What is said of the United Brethren, or Moravians?

What is the number of these Christians? When did they begin their missions?

How and where have they since pursued their benevolent operations?

## SECTION VA

# Particular Modern Geography.

We give only a short summary of this article, which is fully treated in our School Abridgment, the study of which it is intended, shall succeed

that of this First Book.

We have already given an account of the great Oceans on the globe, and of the grand divisions of the Earth, with some general views of their population, the varieties of the human race, their languages, different governments and religions, and added some interesting calculations.\*

The two great continents are divided as fol-

lows:

The Eastern, into Asia, Europe, and Africa. The Western, into North America and South

America.

The Islands of the great Oceans, are divided into Australasia, the Asiatic Isles, Polynesia, the African Isles, and the Islands of North and South America.

These divisions, with the great oceans and smaller portions of water, embrace the whole

face of the globe. For an account of the divisions of water, see p. 29. The divisions of land are now to be considered, and in the order in which they are named above.

#### ASTA.

Boundaries and Extent.—Asia is bounded N. by the Frozen ocean, E. by the Pacific ocean, S. by the Indian ocean, W. by the Red sea, which separates it from Africa, the Mediterranean sea, the Archipelago, the Black sea, and straits of Caffa; thence to the Northern ocean, the line is unsettled. Its greatest length is 7370 miles; its breadth 4230, containing 154,000,000 square miles.\*

Divisions and Population.—We give here the common ivisions, observing only that M. Brun has divided this country into 19 regions, corresponding with its natural divisions.

1. Turkey in Asia,	- 12,000,000
2. Russia in Asia,	- 2,700,000
3. Arabia,	- 12,000,000
4. Independent Tartary,	- 4,000,000
5. Persia,	- 18,000,000
6. Cabul and Beloochistan,	- 14,000,000
7. Hindostan, or Hither India,	- 101,000,000
8. Farther India,	- 17,000,000
9. Chinese Empire,	- 150,000,000
10. Japan,	- 25,000,000
11. Asiatic Islands,	- 18,000,000
About 373,000,000 souls in the	10 divisions, or

\* M. Brun;

the whole of continental Asia.

#### EUROPE.

Boundaries and Extent.—Europe is bounded N. by the Frozen ocean; E. by Asia; S. by the Mediterranean sea, which divides it from Africa; and W. by the Atlantic ocean. Its greatest length is about 4,000 miles; its breadth 2,400; containing, according to Hassel, 3,387,000 square miles.

Divisions and Population.—The political, or

mational divisions of Europe are,

Sittle divisions of Line of the	
	Population.
1. Great Britain,	12,600,000
2. Ireland,	4,500,000
3. Norway,	930,000
4. Sweden and Lapland,	2,470,000
5. Denmark,	1,565,000
5. Russia in Europe, ·	41,773,000
7. Poland,	*2,800,000
8. Prussia,	10,000,000
9. Austria, including 5 great races	
10. Germany,	10,500,000
11. Switzerland,	1,750,000
12. Netherlands,	5,285,000
13. France,	29,300,000
14. Spain,	10,350,000
15. Portugal,	3,683,000
16. Italy, including Sicily and	
Sardinia,	19,044,000
17. Turkey,	10,000,000

<sup>\*</sup> This is all that is le't of Poland, once among the powerful kingdoms of Europe, the greater part of her former territory and population being divided between Russia, Austria; and Prussia.

#### AFRICA.

Boundaries and Extent.—Africa is bounded N. by the Mediterranean sea; E. and S. E. by the Red sea, and Indian ocean; S. W. and W. by the Ethiopic,\* and Atlantic oceans. It contains about 11,700,000 square miles.

Divisions and Population.—A great part of the interior of Africa, is an unexplored and unknown region. The larger and smaller kingdoms, the most of them of undefined limits, may be conver-

niently divided into,

1. Northern Africa,

2. Eastern do.

3. Southern do.

4. Western do.

5. Central do.

These large divisions are subdivided into a great number of smaller ones, the whole containing, according to Hassel, 99,000,000 of inhabitants; according to M. Brun, only 70,000,000.

### AMERICA.

Divisions and Population.—This continent has the Pacific ocean on the W. the Frozen ocean N. and the Atlantic and Ethiopic oceans E. and is divided as follows:

1. North America.

2. South America.

These are separated by the Isthmus of Darien.

3. American Islands.

These divisions contain 50,000,000 of inhabitants.

#### NORTH AMERICA.

Divisions and Population.—North America is divided into,

- 1. British America on the north.
- 2. United States in the middle,
- 3. Spanish America on the south.

Russia has a small settlement on the north-west.

#### BRITISH AMERICA.

1.	Nova Scotia,	_	_	-	_	-	_	_	Population. 100,000
2.	New Brunswick,		-	_	-		-	-	60,000
3.	Lower Canada,	-	_	_	-	-	-	_	300,000
	Upper Canada,	_	_	-	-	-	-	-	100,000
	The Islands of N							_	

#### UNITED STATES.

Boundaries and Extent.—The United States are bounded N. by British America; E. by the Atlantic ocean; S. by the Gulf of Mexico; S. W. by the Spanish dominions; W. by the Pacific ocean -containing 2,000,000 square miles.

Divisions and Population.—The United States

are	aivi	aeu anu pe	copica	us	101	1011	139		
E	1.	Maine,	-1-	-	-	-	-	-	298,335
Eastern	2.	New-Har	npshir	e,	-	-	-	-	244,161
eri	3.	Vermont,	40	-		-	-	-	235,761
2	4.	Massachu	setts,	-	-	-	-	-	523,287
States	5.	Rhode Is	land,	-	-	-	**	-	83,059
es	6.	Connection	cut,	-2		-	-		275,248

₹ 7. New-York,	1,372,812
8. New-Jersey,	277,585
8. New-Jersey,	1 040 000
\$ 10. Delaware,	72,749
11. Maryland,	407,350
∞ (12. Virginia,	1 001 000
13. North-Carolina,	638,829
14. South-Carolina,	490,309
15. Georgia,	340,989
5 16. Alabama,	
2 16. Alabama,	127,901
17. Mississippi,	75,448
2000	153,407
No. Tennessee,	422,813
§ 20. Kentucky,	564,317
§ ] 21. Ohio,	581,434
22. Indiana,	147,178
19. Tennessee,	55,211
© (24. Missouri,	66,586
District of Columbia,	33,039
Michigan,	8,806
Northwest,	
₹ Arkansaw,	14,273
Missouri,	,
Northwest, Arkansaw, Missouri, Oregon,	
Florida,	15,000
Total	

Note - By accident, Spanish, North and South America, and the West Indies, were sent too late for insertion in their place, which is here, and will be found in an appendix; which see.

- - 9,625,724

Total population in 1820,

#### OCEANICA.

Under this general head we embrace all the principal islands of the several oceans on the globe.

1. Asiatic Islands.—These lie in the great Indian ocean, S E. of Asia.

2. African Islands .- Madagascar, Isle of France

St. Helena, and others on the coast of Africa.

Australasia.—Embracing New Holland, and the adjacent islands of Papua, or New Guinea, New Britain, New Ireland, and the Solomon isles, New Caledonia, and the New Hebrides, New Zealand, and Van Dieman's land, extending from lat. 3° N. to lat. 50° S., and from long. 95° to 185° E.

4. Polynesia.—Embracing all the Islands from lat. 50° S. to 35° N., and from 170° E. long. from London, to 130° W., viz. 1. The Pelew Islands. 2. The Ladrones. 3. The Carolines. 4. The Sandwich Isles. 5. The Marquesas. 6. The

Society Isles. 7. The Friendly Isles.

5. American Islands.—Under this head are embraced Greenland, (which has lately been found to be an island,) Newfoundland, the West India islands, and all other islands on the American coast.

# Questions on Section VI.

Of what has an account already been given?
How are the two great continents, the eastern and western, divided?

Mention the divisions of each.

And the divisions of the islands.

Do these divisions, with the great oceans, em

brace the whole face of the globe?

Give the boundaries of Asia—its length—breadth—contents in square miles—its divisions—their number—and population of each division.

How does M. Brun divide Asia?

Give the boundaries of Europe-its length -breadth-its contents in square miles-its divisions—their number—the population of each.

Give the boundaries of Africa-its contents in square miles—its divisions. What is said of its

interior regions?

Of its larger and smaller kingdoms?

Into how many divisions may Africa be conveniently divided?

Name them.

What is the estimated population of Africa? Give the boundaries of America-its divisions —the number of its inhabitants.

What isthmus separates North and South Ame-

rica?

Give the divisions of North America.

What are the divisions of British America, and.

the number of inhabitants in each?

Give the boundaries and extent of the United States—the number and names of the several states and territories—the population of each in 1890 \*

What are contained under the general head of

Oceanica?

How many divisions are there under this head?

Name them.

Where do the Asiatic islands lie?

The African?

What islands does Australasia embrace?

What Polynesia?

Give the latitudes and longitudes of these divisions, and point them out on the map.

Where do the American islands lie?

Name the principal ones.

<sup>\*</sup> See Appendix.

# PROSPECTIVE GEOGRAPHY.

### INTRODUCTION.

In reviewing the long way we have travelled, from the creation down to the present time, through a period of nearly 5000 years, we find events, the most interesting and important, connected with every step of our progress. Beginning with the creation of the heaven and the earth, we have described the process of that great work, as given us by Moses, in the successive parts of it, to its completion, when the earth was fitted to be the happy abode of innocent beings.

We have described the solar system in its several parts; the earth which we inhabit, particularly, in its grand divisions and natural history. We have given an account of the creation, the high rank and character of MAN, and the vast and splendid inheritance bestowed on him by his Maker. We have described, also, the delightful garden of Eden, which the Creator himself selected and planted for the first parents of our race. To instruct and gratify our young readers, we have given a geographical description of Mesopotamic,

that most interesting country, in which this garden was situated, and the rivers and places in it, which are mentioned in the Bible.

We have given an account of the building of the ark by Noah; of the flood, and its awful effects on the earth; of the building of Babel; of the confounding of the original and common language of mankind; the forming of new languages for different portions of them;—thus laying the foundation for their dispersion over the face of the earth, and becoming the seeds of the nations who have since inhabited it. We have presented a general view of the introduction of Christianity, and of its wonderful effects on the world.

We have taken a general and particular geographical survey of the earth, as it now lies before us, and have noticed some of the wonderful events of the last half century, and the varied and innumerable improvements which have been made in every thing which relates to the elevation, convenience, increase, and happiness of mankind. New nations, we find, are springing up in parts of the world, till lately hardly known, which will probably soon rival the old ones. The inhabitants of the earth are every where waking up—combining together—pressing onward—and in many different ways urging on the advancement of things to some great and glorious end. "In the progress of these events," a late writer pertinently observes, "it is impossible not to perceive that an immense change is about to be effected, with respect to the aspect of the civilized world."

Contemplating these things, every one will be ready to ask—what is the nature of these expected changes, and of this glorious end which they are to accomplish? and when are these things to

be? To satisfy inquiries of this kind, as far as they can be satisfied, is our object in this con-

cluding part of our little work.

We are fully aware, that of the future it becomes us to speak with caution. We can trace back our own way to former ages by the monuments which those who have gone before us have left behind them, and can tell with confidence what has been. The present is before us, and of that, therefore, we can speak with certainty. But a darkness hangs over the future, which nothing but the eye of the Great Supreme can penetrate.

## SECTION 1.

There will be a great moral change in the future ages of the world.

Although we are not gifted with capacities to know the future, as well as we know the past and the present, still we are not left in total ignorance of what is to be. He who sees alike the past, the present, and the future, has kindly given us a Revelation, which sheds a light upon the future. By its aid we can look forward and discern some of the changes which will take place in the future ages of the world, and what is to be the end of all things pertaining to the heavens and the earth. By this Revelation, contained in the Bible, we are plainly, in very many places, and in various language, taught, that a great moral change, affecting the whole human race, will take place hereafter, and probably is already commencing, in the uncommon events of the present day. By this change, the ruins of the fall, to a great extent, will be repaired; the power and influence of the Messiah's reign will be felt and acknowledged by all nations, producing universal peace and willing obedience to the law of the Creator; and the earth and its inhabitants, in a manner and degree beyond our anticipations, will return again to the happy state of perfection, in-nocence, and peace, in which they were originally formed. This most desirable state of the world was intimated in the very first promise kindly made to man, immediately after his fall —"The seed of the woman (meaning Christ the Messiah) shall bruise the serpent's head." The same great event was announced in the sacred prophecies, in plainer and plainer language, in successive perieds, till finally, the subject arose in the view of the prophet, to such magnitude and interest, that it occupies nearly the whole of the last book in the sacred volume.

But a very few, only, of the almost innumerable passages in the Bible, which have more or less bearing on the period which is to come, can be recited in this little book. A few of those which are more explicit, however, will be sufficient for our purpose, which is, to put our youthful readers on the inquiry, to find out, and to note down in their little commonplace books (which they would do well always to keep) other passages that relate to the same subject. It becomes the young, particularly, to look to the future, and to ascertain from every source at their command, the events, which are probably to happen in the age in which they are to live, and to act.\*

Some of the passages which describe the future period of the world follow. No comment is made on them. "Thou art my Son, this day have I begotten thee. Ask of me, and I shall give thee

<sup>\*</sup> The author here remarks, that it has been his great object to bring before his little readers, the vast subjects comprised in this book, which would seem, at first view, far to exceed the comprehension of the minds of children and youths to lead them to inquire, and to ask questions, which they can do on every topic which is here treated. The plan, he is sensible, is new and, but an experiment; he feels a strong confidence in its success.

the heathen for thine inheritance, and the uttermost parts of the earth for thy possession." [Ps. ii.] "All kings shall bow down before him." "It shall come to pass in the last days, that the mountain of the Lord's house shall be established in the top of the mountains, and shall be exalted above the hills; and all nations shall flow unto it. And many people shall go and say, Come ye, and let us go up to the mountain of the Lord, to the house of the God of Jacob, and he will teach us of his ways, and we will walk in his paths; for out of Zion shall go forth the law, and the word of the Lord from Jerusalem. And he the word of the Lord from Jerusalem. And he shall judge among the nations, and shall rebuke many people, and, they shall beat their swords into ploughshares, and their spears into pruninghooks; nation shall not lift up sword against nation, neither shall they learn war any more." [Isaiah ii.] "There shall be nothing to hurt or offend in all the holy mountain." "For as the earth bringeth forth her bud, and as the garden causeth the things that are sown into it to spring forth, so the Lord will cause righteousness and praise to spring forth before all the nations." [Is. lxi.] The stone which was cut out of the mountain, and smote without hands the image, became a great mountain and filled the whole earth." [Dan. ii. 35.] "Many shall run to and fro, and knowledge shall be increased." [Dan. xii. 4.] "The light of the moon shall be as the light of the sun, and the light of the sun shall be seven-fold, as the light of seven days." [Isa. xxx. 26.] "The knowledge of the Lord shall cover the earth, as the waters cover the sea." [Is. xi. 9.] "All shall know the Lord from the least unto the greatest." "Who hath heard such a thing? greatest," "Who hath heard such a thing?

Who hath seen such things? Shall the earth be made to bring forth in one day, or shall a nation be born at once?" [Is. xlvi.] "And it shall come to pass, that from one new moon to anoth-er, and from one sabbath to another, shall all flesh come and worship before me, saith the Lord." [Is. lvi.] "The inhabitants shall not say I am sick." [Is. xxxiii.] "It shall come to pass, that I will gather all nations and tongues, and they shall come and see my glory." [Is. xxxiii.] "He (Christ) shall have dominion from sea to sea, and from the river to the ends of the earth." and from the river to the ends of the earth." [Ps. Ixxiv.] "The kingdom, and the dominion, and the greatness of the kingdom under the whole heaven, shall be given to the people of the saints of the Most High, whose kingdom is an everlasting kingdom, and all dominions shall serve and obey him." [Dan. vii.] "Hath God cast away his people?" God forbid. He hath not cast away his people." "Blindness in part has happened to Israel, until the fulness of the Genfiles be come in. And so all Israel shall be saved." [Rem vi] saved." [Rom. xi.]

The gospel is to be preached, with the Holy Ghost accompanying it, to every nation, and kindred, and tongue, and people, under the whole heaven. Satan is to be bound a thousand years, during which period Christ will reign. And in these happy years the righteous shall flourish, and enjoy

abundance of peace.

We can form but very faint ideas of the very great and wonderful changes, which will have been effected in the world, when these and many ther prophecies, which relate to the future, shall have been fulfilled. Our highest conceptions of the happiness and glory of the period of Christ's M.2 reign on earth, doubtless fall far short of what will be realized by those who live in that period. To serve God and to do good, will be their highest pleasure. Selfishness, that bane of human happiness, which has ever been, and is now, the cause of most of the miseries which afflict our world, will be banished, and give place to the reign of love and good will; and this guilty, polluted, and wretched world, renovated by the power of the Holy Ghost, will again reflect the image of heaven, and as at the first, God will dwell with men. While contemplating this ravishing prospect, the poet shall speak for us the language of our hearts.

"One song employs all nations; and all cry Worthy the Lamb, for he was slain for us." The dwellers in the vales, and on the rocks, Shout to each other, and the mountain tops From distant mountains, catch the flying joy; "Fill nation after nation, taught the strain; Earth rolls the rapturous Hosanna round."

Couper.

# Questions on Section I.

What is the subject of the third part of this book?

In reviewing the preceding parts, what facts and

information do you find?

Relate the particular things enumerated in the Introduction, beginning with the Creation—then the Solar System—the Earth—the Garden of Eden, &c.

What does the contemplation of these things

prompt one to ask?

What is said to be the object of the concluding part of this little work?

How does it become us to speak of the future? Can we speak with confidence of what has been and what now is?

What hangs over the future?

What eye alone can penetrate this darkness?

Can we know the future as we know the past and the present?

Can we know nothing of what is to be?

Whence do we derive our knowledge of the future?

Does this sacred book shed light on the ages to come, and inform us of the end of all things?

What great change does it particularly fore-

tell?

Will this moral change affect the whole world? Is this change probably now commencing?

What are the indications of this?

What are to be the consequences of this change?
 Enumerate those which are stated.

In what promise was this desirable state of things first intimated?

Has this event been announced in other prophecies?

In what language?

What book of the scriptures is almost wholly occupied with this subject?

Are the passages of the Bible which relate to

this subject, few or numerous?

Of what kind are the few, passages selected for this book?

Will these be sufficient to answer the purpose of this book?

What is that purpose?

What book, is it recommended, that children should keep?

To what use should they put such a book?

What does it particularly become the young to

Repeat the prophecies which describe the fu-

ture period of the world.

Can we form any adequate ideas of the changes which will take place, the scenes of glory and happiness which will open to the view, and enjoyment of those who will live on earth during this period?

What will be their employment?

What is said of selfishness?

Will this odious spirit, this most fruitful source of human misery, be banished from among men during this happy period?

What will follow?

Repeat the lines of Cowper's description of the state of the world at this period?

### SECTION II.

Consequences of the great Moral Change, described in the foregoing section.

THERE will be no more wars. The passions which now occasion them, will be subdued. The earth will not be stained with human blood, as it now is. Mankind every where will love one another, and seek each other's good, performing all acts of kindness and good will, fulfilling all the offices of the most perfect friendship. All ranks and classes, of both sexes; all of every age, nation, and language, under the whole heaven, will be much better people, and have far higher enjoyments, than any, even the best, with whom we are now acquainted. They will be capable of doing vastly more good than those who now dwell upon the earth, and will do far more. Now, benevolent plans and efforts are opposed, and often frustrated, by wicked menthen, there will be no contending interests, all will be actuated by one spirit. The intelligence and wisdom of all will be combined to devise, and their efforts to execute, the best and most extensive plans for doing good. Now, plans of benevolence are retarded, suspended, and often defeated, from the want of sufficient pecuniary resources—then, the millions on millions now expended in wars, in measures and means of national defence and security—the millions also hoarded

by avarice, expended in gratifying the pride ambition, revenge, and other unlawful passions and appetites of mankind, and particularly in intemperance—and the millions more which will be saved by the avoidance of all the multitude of expensive vices, which will now have ceased, by an increase of human industry, and by a wise economy in expenditures—all these immense expenditures, redeemed from their present unhallowed uses, may be converted, to all the extent necessary, and will be converted, to purposes of beneficence, and public utility.

This wonderful change, which will take place in the dispositions of men toward each other in this happy period, is described by the prophet Isaiah, and after him by Cowper, in a style of

exquisite beauty.

"The lion, and the leopard, and the bear,
Graze with the fearless flocks; all bask at noon
Together, or all gambol in the shade
Of the same grove, and drink one common stream.
Antipathies are none. No foe to man
Lurks in the serpent now; the mother sees,
And smiles to see, her infant's playful hand
Stretch'd forth to dally with the crested worm,
To stroke his azure neck, or to receive
The lambent homage of his arrowy tongue.
All creatures worship man, and all mankind
One Lord, one Father."\*

<sup>\*</sup> Some writers consider the language of the prophet, in the passage here alluded to by the poet, as figurative, intended merely to illustrate the peaceful and happy state of mankind, during the period he is describing. The poet, however, appears to understand the prophet literally—as does Mr. Henry, who, in his commentary, says, "the lion shall cease to be ravenous, and shall eat straw like the ox, as some think all the beasts of prey did before the fall. The asp and the cockatrice shall cease to be venomous, so that

in view of the wonders opened by the prophe-

"Ah scenes surpassing fable, and yet true; Scenes of accomplished bliss! Which who can see, Though but in distant prospect, and not feel His soul refreshed with foretaste of the joy? Rivers of gladness water all the earth, And clothe all climes with beauty; the reproach Of barrenness is past. The fruitful field Laughs with abundance; and the land, once lean, Or fertile only to its own disgrace, Exults to see its thistly curse repeal'd The various seasons woven into one, And that one season an eternal spring. The garden fears no blight, and needs no fence, I'or there is none to covet, all are full."

In the happy period, which the prophecies lead us to expect, there will be a great increase of useful knowledge—great advances in literature, the sciences, the liberal and the fine arts—and a great multitude of new inventions, adapted to facilitate commercial, literary, and social intercourse, between all nations, and to promote every species of improvements. The earth will be capa-

parents shall let their children play with them, and put their hands among them." This appears to be the natural and correct interpretation of the passage. There were no hurtful beasts, or poisonous reptiles, before the fall, when "the Lord God brought them to Adam" to receive their names. And as there will be "nothing to hurt or destroy," during the period we are describing, we may, I think, safely infer, that not only the wicked dispositions and habits of men will be changed, but those also of all the inferior creatures; else there would remain, in savage beasts and venomous reptiles, "something, both to hurt and destroy" mankind. It is as easy for the Almighty to change the dispositions of beasts and reptiles, as those of men. In neither, can a radical change be wrought, but by miracle.

ble of sustaining a vastly larger population than has existed upon it since the flood; hence we may expect a corresponding increase of its inhabitants. The prophets speak of this period, in language highly descriptive of great prosperity and happiness. The windows of heaven will be opened, and a blessing poured out so large that there will not be room enough to receive it. The devourer will be rebuked, for the sake of those who shall then inhabit the earth, and shall not destroy the fruits of their ground; nor shall the vine cast her fruit before the time in the fields.

The language in which the prophecies, concerning this period are expressed, justifies our expectations of all these things. What has been witnessed by those now on the stage, for the last half century, and what we daily hear and see, very plainly indicate that these wonderful improvements have already commenced, and are now in very rapid progress. In regard to them, the civilized world has already passed through the stage of infancy, and is advancing, under strong er and still stronger impulses, to manhood. Children of tender age, by means of the increased advantages for their education, now make greater acquirements in the various branches of useful knowledge, than their fathers and mothers before them, made during a long life.

In this happy period, also, obstacles to improvement, which have hitherto existed, will be removed. Now, multitudes absolutely destroy, and still greater numbers impair, their mental and bodily energies, by intemperance, both in eating

and drinking;\* then these vices will be unknown, and all will enjoy vigor, both of body and mind. Now men are sick and feeble; then none will say "I am sick." Now time is undervalued, and in a thousand different ways, misspent and wasted; then it will be duly estimated, and every moment, as it passes, will be improved to some useful purpose. Now the millions that are wanted for the various purposes of benevolence, are wasted in wars, in support of the vices of mankind, and hoarded by misers; then wars and vices will both cease, and so of course will their expenses, and there will be no misers; and thus this immense fund will be redeemed, and all hearts will be prepared to apply it, in all the ways in which it can be made subservient, to the welfare of the world. In such a state of things, who can anticipate the advances which will be made in every thing which will bless mankind?

# Questions on Section II.

What is the first consequence named, of the great moral change we have described?

Why will there be no wars?

Is the earth now stained with human blood?

Will it be during the Messiah's reign?

What will then be the feelings and conduct of mankind towards each other?

<sup>\*</sup> Physicians have estimated, that at least three-fourths of the diseases, which now afflict our world, are either wholly produced, or rendered much more distressing and fatal, by intemperance in drinking. Add to this, the like injurious effects of excess in eating, and it will be found, that in these two vices only, we have the causes of nearly the whole of human diseases.

What will then be the character of men, compared with their present character?

Of what will they then be capable?

How are benevolent plans and efforts now treated?

How will they be treated then?

What cause now retards, and often defeats, benevolent plans?

What means for their support will then exist?

Will these means be immense?

From what sources will they arise?

To what purpose may they, and will they,

doubtless be converted?

Which of the prophets has described, in language most pertinent and beautiful, the change in the dispositions of men, which is expected hereafter to take place?

What celebrated poet has put his description

into verse?"

Repeat the lines quoted. Also those which follow.

How do some writers consider the language used by the prophet Isaiah, in the passage quoted? [The answer is in the note.]

How does the poet understand them?

How does Mr. Henry?
\* Repeat his remarks.

Is this probably the correct meaning of the prophet?

What reasons are assigned to support it?

If, during the period in question, nothing is to exist which shall "hurt or destroy," must not the savage and ferocious dispositions of wild beasts and venomous reptiles be changed, and become harmless, as they were when the Lord God brought them to Adam to receive their names?

If this is not so, how will the prophecy be fulfilled?

Will it not be as easy for the Almighty to change the bad tempers of beasts, as those of wicked men?

Can either be done radically and effectually,

without a miracle?

What other consequences will follow the great moral change which has been mentioned?

How do the prophets speak of this period?

How do they describe this prosperity?

Does the language used by the prophets justify expectations of this kind?

What does the state of things for the last half

century, and their present state, indicate?

In regard to these things, what is said of the advances of the civilized world?

What is said of the improvements of children

now, compared with those of their parents?

What great obstacle to improvement now exists, which will then be removed?

What is said of intemperance in the note?

What is said in regard to sickness?

What in regard to time?

What is now done with the millions wanted for

benevolent purposes?

What will be done with these millions in the happy period before us?

What will be the effect?

## SECTION III.

Of the period immediately succeeding the close of the thousand years of happiness in this world. Satan loosed. The Resurrection. The final judgment. The burning of the world.

WE have no light on the events of these most interesting periods, but what we derive from the Holy Scriptures. The description of the first there given by the apostle John, in these few

words, which are very plain and explicit.

"And when the thousand years are expired, Satan shall be loosed out of his prison, and shall go out to deceive the nations which are in the four quarters of the earth, Gog and Magog, to gather them together to battle: the number of whom is as the sand of the sea. And they went up on the breadth of the earth, and compassed the camp of the saints about, and the beloved city: and fire came down from God out of heaven, and devoured them And the devil that deceived them was cast into the lake of fire and brimstone, where the beast and the false prophet are, and shall be tormented day and night, for ever and ever."\*

Reference is had to this event by the apostle, in the 3d verse of this chapter. And the angel who seized and bound the old serpent, "cast him, into the bottomless pit, and shut him up, and

set a seal upon him, that he should deceive the nations no more, till the thousand years should be fulfilled; and after that he must be loosed for a little season." A short period, after his confinement for a thousand years, will be allowed to the adversary, the devil, to deceive the nations, and to re-establish his kingdom among men. Of the events of this "little season," we know nothing, other than what is contained in the passages quoted. The efforts of Satan will be vigorous and powerful, aided by "Gog and Magog, the number of whom will be as the sand of the sea;" but the desperate battle in which he will rashly engage, will soon terminate, by the immediate interposition of the divine power, in the awful and complete overthrow of him and his innumerable army. This is to be his last effort, after which, he is to be "cast into the lake of fire and brimstone, with the beast and the false prophet, and shall be tormented day and night, for ever and ever."

After this last victorious conflict with Satan, the General Resurrection of the dead, and the final Judgment of mankind will immediately follow, which will be the last transactions on the face of this polluted earth. Of this grand and amazing scene, of which the universe of intelligent beings will be witnesses, the apostles and our blessed Saviour himself, have given us descriptions, here presented in their own words.

<sup>\*</sup> Who "Gog and Magog," are, and where they will dwell in such numbers. during the thousand happy years, we know not, nor do we make any conjectures, on a subject, left in the dark, and therefore not important for us to know.

The Savior says, "The hour is coming, when all that are in their graves shall hear the voice of the Son of God, and shall come forth; they that have done good, unto the resurrection of life, and they that have done evil, unto the resurrection of condemnation." St. Paul says, "The Lord himself shall descend from heaven with a shout, with the voice of the archangel, and with the trump of God; and the dead in Christ shall rise first, and with those who are alive and remain," at that period, "shall be caught up together, to meet the Lord in the air." "We shall all be changed, in a moment, in the twinkling of an eye, at the last trump: for the trumpet shall sound, and the dead shall be raised incorruptible, and put on immortality."

The final Judgment the apostle John thus de-

scribes,

"And I saw a great white throne, and him that sat on it, from whose face the earth and the heaven fled away; and there was found no place for them. And I saw the dead, small and great, stand before God; and the books were opened; and another book was opened, which is the book of life: and the dead were judged out of those things which were written in the books, according to their works. And the sea gave up the dead which were in it; and death and hell delivered up the dead which were in them; and they were judged every man according to their works. And death and hell were cast into the lake of fire. This is the second death. And whosoever was not found written in the book of life, was cast into the lake of fire."

The description of the Judge himself follows.

and all the holy angels with him, then shall he sit upon the throne of his glory: and before him shall be gathered all nations; and he shall separate them one from another, as a shepherd divideth his sheep from the goats: and he shall set the sheep on his right hand, but the goats on the left. Then shall the King say unto them on his right hand, Come, ye blessed of my Father, inherit the kingdom prepared for you from the foundation of the world: for I was an hungered, and ye gave me meat, I was thirsty, and ye gave me drink: I was a stranger, and ye took me in: naked, and ye clothed me: I was sick, and ye visited me: I was in prison and ye came unto visited me: I was in prison and ye came unto me. Then shall the righteous answer him, saying, Lord, when saw we thee an hungered, and fed thee? or thirsty, and gave thee drink? When saw we thee a stranger, and took thee in? or naked and clothed thee? Or when saw we thee sick, or in prison and came unto thee? And the King shall answer, and say unto them, Verily I say unto you, inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me. Then shall he say also unto done it unto me. Then shall he say also unto them on the left hand, Depart from me, ye cursed, into everlasting fire, prepared for the devil and his angels: for I was an hungered, and ye gave me no meat: I was thirsty, and ye gave me no drink: I was a stranger, and ye took me not in: naked, and ye clothed me not: sick, and in prison, and ye visited me not. Then shall they also answer him, saying, Lord, when saw we thee an hungered, or athirst, or a stranger, or naked, or sick, or in prison, and did not minister unto thee? Then shall he answer them, saying. Verily I say unto you, inasmuch as ye did it ing. Verily I say unto you, inasmuch as ye did it

not unto one of the least of these, ye did it not to me. And these shall go away into everlasting punishment: but the righteous into life eternal."

The scene of the judgment having past, then the prophet directs:—"Lift up your eyes to the heavens, and look upon the earth beneath; for the heavens shall vanish like smoke, and the earth shall wax old like a garment."\* The apostle Peter gives a more particular description of the awful scene of an expiring world. "But the heavens and the earth, which are now, by the same word, are kept in store, reserved unto fire, against the day of judgment, and perdition of ungodly men. The day of the Lord will come as a thief in the night, in which the heavens shall pass away with a great noise, and the elements shall melt with fervent heat, the earth, and the works that are therein, shall be burnt up." "It is fit," says President Davis,† "that so guilty a globe, that had been the stage of sin for so many thousands of years, and which even supported the cross on which its Maker expired, should be made a monument of the divine displeasure, and either be laid in ruins, or refined by fire."

The following is Dr. Young's description of

this amazing scene:

"See all the formidable sons of fire, Eruptions, earthquakes, comets, lightnings, play Their various engines; all at once discharge Their blazing magazines; and take by storm, This poor terrestrial citadel of man."

<sup>\*</sup> Is. lvii. 6.

<sup>†</sup> See his sermon on the Judgment.

THE WORLD ON FIRE.



1 Pet. iii. 10.

As the polluted bodies of good men are purified by perishing in the grave; so a world, stained with human blood, and corrupted by human vices, is destined to be purged as by fire. Both are to be dissolved and perish; and both, Pheenix-like, will spring into a new existence, freed from fall the effects of sin, prepared, the one to enjoy, the other to be the theatre of enjoying, perfect, ineffable, and endless happiness.

# Questions on Section III.

What are the three periods mentioned at the head of this section ?

Whence do we derive our only light, on the

great events of these periods?

What, according to the apostle John, will happen to Satan, at the expiration of the thousand vears?

For how long a time is Satan to be loosed?

For what purpose?

What will he attempt?
Whose aid will he have?

What will be the issue of the great battle? What will be done to him after his defeat?

After this victorious conflict, what will next follow?

What will follow the resurrection?

Will the judgment be the last transaction in this world?

Who have given descriptions of the final judgment.

Recite that given by John.

And the more full one given by Christ himself?

After the judgment is past, what is next to be looked for?

What does the prophet direct?

Give the apostle's description of this awful concluding scene.

How are the bodies of good men purified? How is this polluted world to be purified?

What must happen to both?

After they have perished, what will next take place concerning them?

## SECTION IV.



2 Pet. iii. 13.

The New Heavens, and New Earth.

Ir would seem, from the Scriptures, that "the heavens and the earth," like man, their propri-etor and lord, are to perish only for the purpose of becoming immortal. Man dies, his body moulders into dust; but it is raised again a spiritual body, prepared for the society of spirits made perfect, who dwell in heaven with God. The earth and the heavens also, are to be burned up, and to pass away; "nevertheless," says the apostle, "we, according to the promise of God. look for new heavens and a new earth, wherein dwelleth righteousness."\* The apostle John informs us, that he saw this new heaven and

new earth, and from his own knowledge he thus describes them. "And I saw a new heaven and a new earth; for the first heaven and the first earth were passed away; and there was no more sea. And I John saw the holy city, new Jerusalem, coming down from God out of heaven, prepared as a bride adorned for her husband. And Î heard a great voice out of heaven, saying, Behold, the tabernacle of God is with men, and he will dwell with them, and they shall be his people, and God himself shall be with them, and be their God. And God shall wipe away all tears from their eyes; and there shall be no more death, neither sorrow nor crying, neither shall there be any more pain: for the former things are passed away. And he that sat upon the throne said. Behold, I make all things new. And he said unto me, Write: for these words are true and faithful. And he said unto me, It is done."\*

A further description of the New Jerusalem, is given in the last chapter of the Bible. "And he showed me a pure river of water of life, clear as crystal, proceeding out of the throne of God, and of the Lamb. In the midst of the street of it, and on either side of the river, was there the tree of life, which bare twelve manner of fruits, and yielded her fruit every month: and the leaves of the tree were for the healing of the nations. And there shall be no more curse: but the throne of God and of the Lamb shall be in it; and his servants shall serve him: and they shall see his face; and his name shall be in their foreheads. And there shall be no night there; and they need no candle, neither light of the sun; for the Lord God givethe

them light; and they shall reign for ever and ever."

Bishop Newton shall be our commentator on this passage. "The church of Christ shall endure through all times and changes in this world, and likewise in the world to come. It shall be glorious upon earth during the millennium, and shall be more glorious still, in the new earth, after the millennium, to all eternity. Earth," purified by fire, "shall then become as heaven; or rather it shall be heaven upon earth, God dwelling visibly with men: and there shall be no more death, which cannot come to pass till death shall be totally abolished, and till the former things, the first heaven and the first earth, on which sin and death reigned, are passed away. He who sat upon the throne as Judge of the world, declares. "Behold I make all things new." He is the author of this second, as he was of the first creation; and he commands that these things be written for the edification of his church, with a firm assurance of their truth and certainty."\*

We have thus completed our Geography of the earth and the heavens, in the largest sense of the word, from their creation, till purified by fire, they are swallowed up in eternity, and become the everlasting dwelling-place of glorified and happy human beings. The whole view here presented, cannot fail to fill the mind of every one who duly contemplates it, with sublime and profitable ideas of the wisdom, the grandeur, and power of God; and with strong desires to dwell for ever in this new and happy abode. If those

<sup>\*</sup> Bishop Newton's Dissertations on the Prophecies.

who read, and the youth who may study this little book, shall in consequence admire and love Him more, and obey Him better, and do more good to their fellow beings, and become prepared for heaven, the author, who has had great pleasure in writing it, will feel that he has a rich and abundant reward.

Some, doubtless, at first view, will pronounce this book too serious for its subject. But He on whose authority we have relied, whose pattern we have followed, and who has furnished us with the greater part of our information, has not thought so, and we do not aspire to be wiser than He is. We know that it has not been the custom to write geography in this form; but we deliberately think it the most natural form, and the best calculated to give us enlarged, sublime, and correct ideas of the subject. If so, we cannot but express a hope that the plan in future, may be adopted in our larger geographical works.

## Questions on Section IV.

What is the subject of this last section? Are the heavens and the earth to perish? For what purpose?

What is said of man?

What of the heavens and the earth?

What, according to the promise of God, do we look for?

Give the apostle John's description of the new heaven and earth which he saw.

What does Bishop Newton say concerning the church of Christ?

What will the new earth become?

What will be the state of the new earth in regard to death?

What does the Judge of the world declare?

Did he make the present earth, and will he make the new one also?

What does he command concerning these things?

For what purpose have they been written? What does the author say of this work?

What will probably be the effect of the whole view of the Geography which he has presented?

What does he suppose may be the effect on

those who read and study this little book?

Should it have this effect, what will be the consequence to the author?

What will some probably pronounce this book

to be?

What answer does the author give to this objection?

Has it been the custom to write Geography in

this form?

What opinion, notwithstanding, does the authorgive of it?

Repeat his concluding remark:

### APPENDIK.

"Omitted in its place, p. 123.

#### SPANISH NORTH AMERICA.

Boundaries .- N. and N. E. by the United States : E. by the Gulf of Mexico, and the Caribbean sea S. by the Isthmus of Darien; W. by the Pacific ocean; containing 1,258,000 square miles.

	Divisions			No	Provinc	es. Pe	pulation in 1825
1.	Mexico,	or New	Spain,	,	15	-	5,840,000
2.	Guatima	la, -	-		- 6	-	1,500,000

### WEST INDIES.

These Islands, 33 in number, lie between Florida and the northern coast of S. America; and contain, together, 105,000 square miles, 450,000 white inhabitants, and 1,600,000 mulattoes and negroes .- Total 2,050,000.

The island of Hispaniola, or Hayti, is independent; the rest belong to Great Britain, Spain, and a few to other European nations.

### SOUTH AMERICA.

Boundaries .- It has North America, and the West Indies, N.; the Atlantic and Ethiopic oceans, E.; Terra del Fuego, S.; and the Pacific ocean W. It contains 7,000,000 square miles.

	Divisions.						Population.
1.	New Granada,		-	-	-	-	1,800,000
2.	Colombia,	-	-	-	~	-	728,000
3:	Guiana,	**		-	~	-	220,000
4.	Peru, -	-	-	-	-	-	1,077,000
5.	Brazil, -	-	-	-	~	-	2,400,000
6.	Buenos Ayres,		- 11-1	-0.10	-	-	2,000,000
7.	Chili, -	-	-	-1	-	-	1,200,000
	Patagonia,	- 11	- 1	-	-		unknown.
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Except Brazil, which is connected with Portugal, these late provinces of Spain, have thrown off the yoke

of that kingdom, and become independent states.

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